MITSUBISHI ELECTRIC

Changes for the Better

SPLIT-TYPE,AIR CONDITIONERS

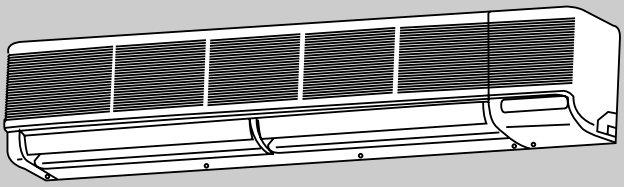
1997

No. OC129
REVISED EDITION-A

TECHNICAL & SERVICE MANUAL

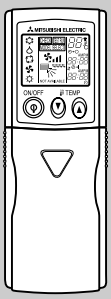
Series PK Wall Mounted

Indoor unit [Model names]	[Service Ref.]		
1997, 1999, 2001	1997	1999	2001
PK-1.6FLA	PK-1.6FLA$_3$		
PK-2FLA	PK-2FLA$_3$		
PK-2.5FLA	PK-2.5FLA$_2$		PK-2.5FLA$_3$ PK-2.5FLA$_4$
PK-3FLA	PK-3FLA$_2$	PK-3FLA$_3$	PK-3FLA$_4$ PK-3FLA$_5$
PK-4FLSA	PK-4FLSA$_2$		PK-4FLSA$_3$ PK-4FLSA$_4$



Indoor unit

PK-1.6FLA$_3$
PK-2FLA$_3$
PK-2.5FLA$_{2/3}$
PK-3FLA$_{2/3/4}$
PK-4FLSA$_{2/3}$



PK-2.5FLA$_4$
PK-3FLA$_5$
PK-4FLSA$_4$

REMOTE CONTROLLER

- PK-2.5FLA$_3$, PK-2.5FLA$_4$, PK-3FLA$_3$, PK-3FLA$_4$, PK-3FLA$_5$, PK-4FLA$_3$ and PK-4FLA$_4$ are added in REVISED EDITION-A.
- Please void OC129 and OC200.
- This manual does not cover outdoor units. When servicing them, please refer to the service manual No.OC127 REVISED EDITION-A, OC187, OC217 REVISED EDITION-A and this manual in a set.

CONTENTS

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1 TECHNICAL CHANGES

PK-3FLA$_2$ → PK-3FLA$_3$

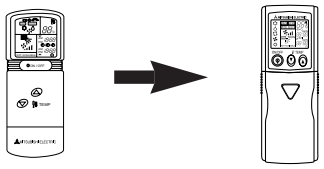
- Outdoor units has changed.

PK-2.5FLA$_2$ → PK-2.5FLA$_3$
PK-3FLA$_3$ → PK-3FLA$_4$
PK-4FLSA$_2$ → PK-4FLSA$_3$

- NOSE has changed by changing its shape.
- UNDER PLATE has changed.
- BOX ASSEMBLY has changed by changing its shape.
- DRAIN PAN has changed by changing its shape.

PK-2.5FLA$_3$ → PK-2.5FLA$_4$
PK-3FLA$_4$ → PK-3FLA$_5$
PK-4FLSA$_3$ → PK-4FLSA$_4$

- The parts No. of REMOTE CONTROLLER has changed. (The following parts numbers are interchangeable.)



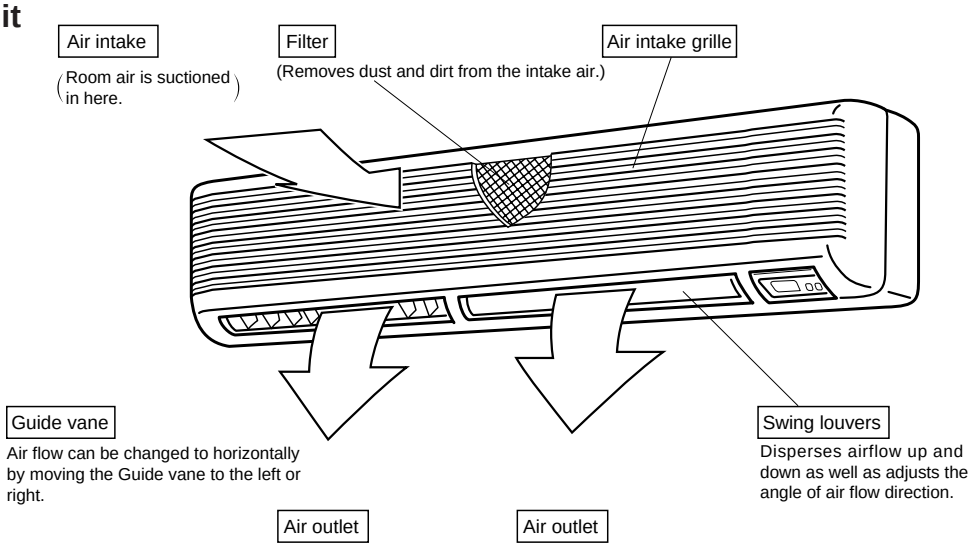
[T7W 570 200] [T7W E06 714]

2 COMBINATION OF INDOOR AND OUTDOOR UNITS

Indoor unit	Outdoor unit (OC127 REVISED EDITION-A)													Outdoor unit (OC187)		Outdoor unit (OC217 REVISED EDITION-A)	
	PU-1.6	PU-2		PU-2.5		PU-3				PU-4				PU-3		PU-3	
	VLJSA$_2$	VJA$_2$	NJA$_1$	VJA$_2$	NJA$_1$	VJA$_2$	YJA$_2$	YJA$_3$	NJA$_1$	VLJSA$_2$	YJSA$_2$	YJSA$_3$	TJSA$_2$	VJC	YJC	VJB	YJB
PK-1.6FLA$_3$	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PK-2FLA$_3$	—	○	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PK-2.5FLA$_2$ PK-2.5FLA$_3$ PK-2.5FLA$_4$	—	—	—	○	○	—	—	—	—	—	—	—	—	—	—	—	—
PK-3FLA$_2$	—	—	—	—	—	○	○	○	○	—	—	—	—	—	—	○	○
PK-3FLA$_3$ PK-3FLA$_4$ PK-3FLA$_5$	—	—	—	—	—	—	—	—	○	—	—	—	—	○	○	○	○
PK-4FLSA$_2$ PK-4FLSA$_3$ PK-4FLSA$_4$	—	—	—	—	—	—	—	—	—	○	○	○	○	—	—	—	—

3 PART NAMES AND FUNCTIONS

● Indoor Unit

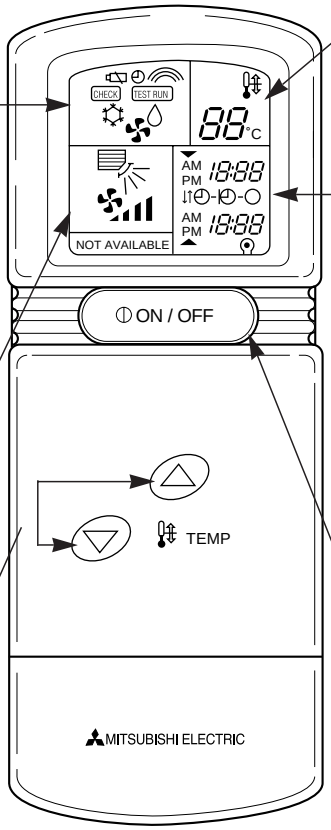


●Remote controller

PK-1.6FLA$_3$
PK-2FLA$_3$
PK-2.5FLA$_2$, PK-2.5FLA$_3$
PK-3FLA$_2$, PK-3FLA$_3$, PK-3FLA$_4$
PK-4FLSA$_2$, PK-4FLSA$_3$

Part No.
[T7W 570 200]

● When cover is closed.



display

OPERATION MODE display
Operation mode display indicates which operation mode is in effect.
• CHECK • TEST RUN display
CHECK&TEST RUN display indicates that the unit is being checked or test-run.

display

Displays when batteries are dead.

display

Displays when setting timer.

display

Lights when signal is sent from the remote controller to the indoor unit.

display

The vertical direction of airflow is indicated in ◀ marks.

display

FAN SPEED display indicates which fan speed has been selected.

button

SET TEMPERATURE button sets any desired room temperature.

display

SET TEMP. display indicates desired temperature set.

CLOCK display

DIsplays the current time.

"◎"display

Flashes when the current time is displayed.

TIMER display

Displays when in timer operation or when setting timer.

"⬆" "⬇" display

Displays the order of timer operation.

" ◴-| " " ◴-○ " display

Displays whether timer is on or off.

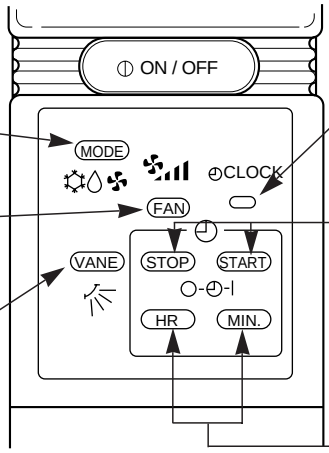
" ▼ " " ▲ " display

Displays when the current time and the timer time can be changed.

button

Push to start operation. Push again to stop operation.

● When cover is open.



MODE SELECT button

MODE SELECT button is used to change cooling. dry (dehumidify) and fan (ventilation) operation modes.

FAN SPEED SELECT button

FAN SPEED SELECT button selects low or high fan speed.

VANE CONTROL button

VANE CONTROL button regulates the vertical distribution of airflow.

SET CLOCK button

Button used to set the current time.

TIMER CONTROL buttons

STOP (OFF timer): when this switch is set, the air conditioner will be automatically stopped at the preset time.
START (ON timer): when this switch is set, the air conditioner will be automatically started at the preset time.

HR. and MIN.buttons

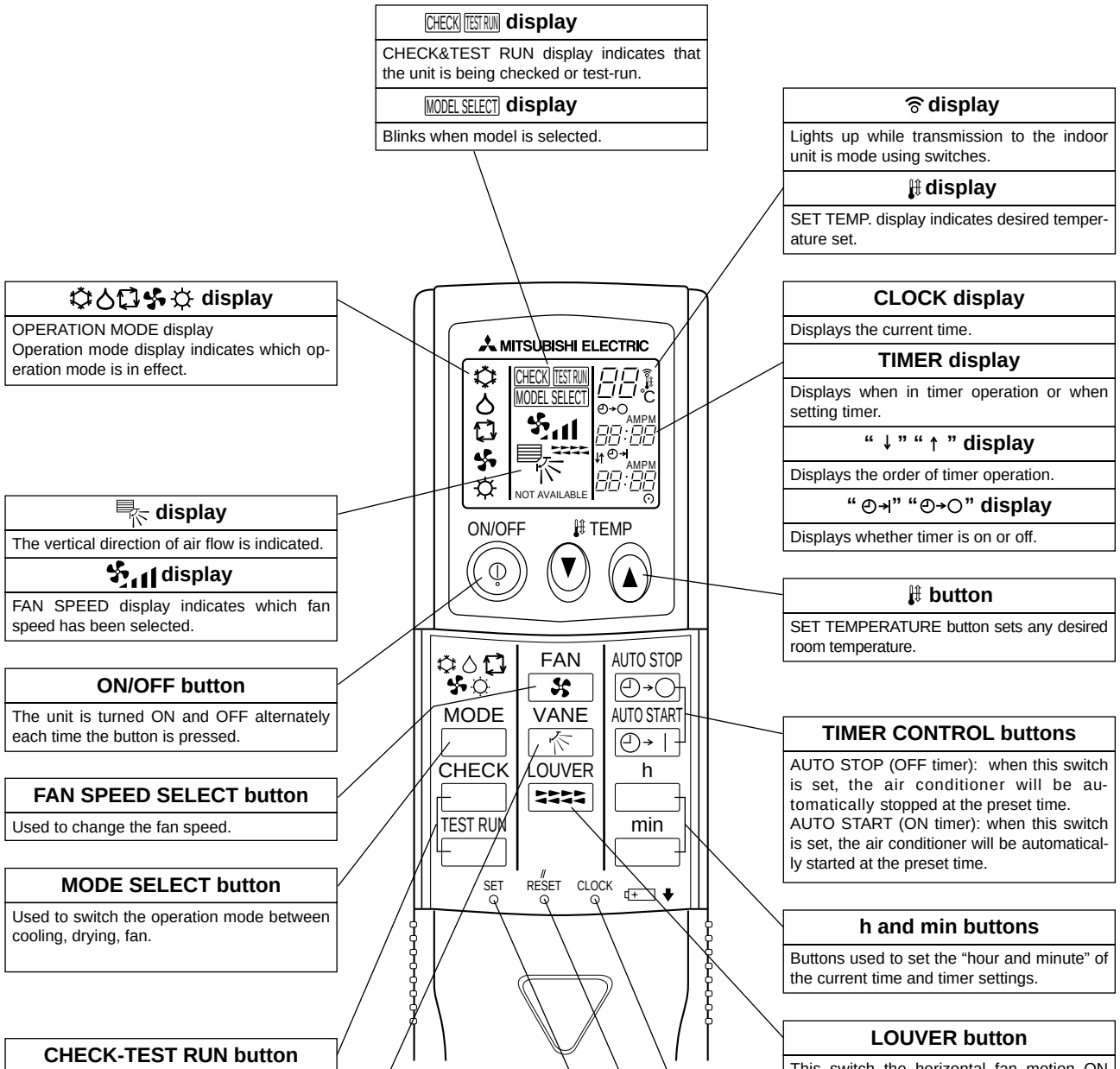
Buttons used to set the "hour and minute" of the current time and timer time.

●Wireless remote controller

● When cover is open.

PK-2.5FLA4
PK-3FLA5
PK-4FLSA4

Part No.
[T7W E06 714]



4 SPECIFICATIONS

1. STANDARD SPECIFICATION

Item \ Service Ref.				PK-1.6FLA3	PK-2FLA3		
Indoor, Outdoor D.B./W.B.°C				27/19.0°C, 35/24°C	27/19.0°C, 35/24°C		※6
Condition				Cooling (JIS B8616)	Cooling (JIS B8616)		※7
Capacity ※1			Btu/h	13,300	19,100	19,000	16,000
			W	3,900	5,600	5,450	4,600
Total input ※1			kW	1.49/1.59	2.52/2.56	2.54	3.06
INDOOR UNIT	**Service Ref.**			**PK-1.6FLA3**	**PK-2FLA3**		
	Power supply(phase, cycle,voltage)			Single, 50Hz, 220/240V	Single, 50Hz, 220/240V	Single, 60Hz, 220V	
	Running current (Power factor)	Input	kW	0.07	0.08	0.09	
			A (%)	0.32(99/91)	0.37(98/90)	0.42(97)	
		Starting current	A	0.4	0.4	0.5	0.5
	External finish			Munsell 3.4Y 7.7/0.8(White)	Munsell 3.4Y 7.7/0.8(White)		
	Heat exchanger			Plate fin coil	Plate fin coil		
		Fan(drive) × No.		Line flow (direct) × 1	Line flow (direct) × 1		
		Fan motor output	kW	0.030	0.030		
		Airflow (Low-High)	m3/min(CFM)	10-13 (353-459)	10-14 (353-459)		
		External static pressure	Pa(mmAq)	0 (direct blow)	0 (direct blow)		
	Booster heater		kW	—	—		
	Operation control & Thermostat			Wireless remote controller & Built-in	Wireless remote controller & Built-in		
	Noise level (Low-High) ※2		dB	36 - 43	38 - 45		
	Cond. drain conn. O.D.		mm(in.)	20 (13/16)	20 (13/16)		
	Dimensions	W	mm(in.)	1,250 (49-3/16)	1,250 (49-3/16)		
		D	mm(in.)	200 (7-7/8)	200 (7-7/8)		
		H	mm(in.)	300 (11-13/16)	300 (11-13/16)		
	Weight		kg(lbs)	17 (37)	17 (37)		
OUTDOOR UNIT	**Service Ref.**			**PU-1.6VLJA2**	**PU-2VJA2**	**PU-2NJA1**	
	Power supply (phase, cycle, voltage)			Single, 50Hz, 220/240V	Single, 50Hz, 220/240V	Single, 60Hz, 220V	
	Running current (Power factor)	Input	kW	1.42 / 1.52	2.44 / 2.48	2.45	2.97
			A(%)	6.7 / 6.9 (97/92)	11.3 / 10.8(98/96)	11.4(98)	13.6(99)
		Starting current	A	30 /33	48 / 52	54	54
	External finish			Munsell 5Y 7/1	Munsell 5Y 7/1		
	Refrigerant control			Capillary tube	Capillary tube		
	Compressor			Hermetic	Hermetic		
		Model		RH247VFC	NHJ41VMD	NHJ33NBD	
		Motor output	kW	1.2	2.0	1.5	
		Starter type		Line start	Line start		
		Protection devices		※4	Inner thermostat, HP/LP switch		
	Heat exchanger			Plate fin coil	Plate fin coil		
		Fan(drive) × No.		Propeller (direct) × 1	Propeller (direct) × 1		
		Fan motor output	kW	0.065	0.065		
		Airflow	m3/min(CFM)	45 (1588)	45 (1588)		
	Defrost method			—	—		
	Noise level ※2		dB	49	49	50	
	Dimensions	W	mm(in.)	870 (34-1/4)	870 (34-1/4)		
		D	mm(in.)	295 (11-5/8)	295 (11-5/8)		
		H	mm(in.)	650 (25-5/8)	650 (25-5/8)		
	Weight		kg(lbs)	45 (99)	60 (132)		
REFRIGERANT PIPING	Crankcase heater		W	—	32 / 38	—	
	Refrigerant Charge		kg(lbs)	R-22 1.3 (2.9)	R-22 1.78 (3.9)	R-22 1.9 (4.2)	
	Pipe size O.D.	Liquid	mm(in.)	9.52 (3/8)	9.52 (3/8)		
		Gas	mm(in.)	15.88 (5/8)	15.88 (5/8)		
	Connection method	Indoor side		Flared	Flared		
		Outdoor side		Flared	Flared		
	Between the indoor & outdoor units	Height difference		※3 Max. 15m	※3 Max. 20m		
		Piping length		※3 Max. 20m	※3 Max. 30m		

※1 Refrigerant piping length (one way) : 5m (16ft)
※2 Noise level is measured in an unacoustic room based on JIS conditions.
※3 Up to 20m it is unnecessary to charge additional refrigerant.
※4 Inner thermostat, HP/LP switch.
※5 Motor protector, Thermal switch, HP/LP switch.
※6 Indoor, Outdoor D.B./W.B. : 29/19°C, 46/24°C
※7 Cooling SSA385, 386

Item \ Service Ref.			PK-2.5FLA2 PK-2.5FLA3 PK-2.5FLA4		
Indoor, Outdoor D.B./W.B.°C			27/19.0°C, 35/24°C		※4
Condition			Cooling (JIS B8616)		※5
Capacity ※1		Btu/h	23,900	24,400	22,700
		W	7,000	7,150	6,650
Total input ※1		kW	2.56 / 2.62	3.01	3.54
INDOOR UNIT	**Service Ref.**		**PK-2.5FLA2 PK-2.5FLA3 PK-2.5FLA4**		
	Power supply(phase, cycle,voltage)		Single, 50Hz, 220/240V	Single, 60Hz, 220V	
	Input	kW	0.095 / 0.095	0.095	
	Running current (Power factor)	A(%)	0.44 / 0.44 (98/90)	0.44 (98)	
	Starting current	A	0.7 / 0.8	0.7	
	External finish		Munsell 3.4Y 7.7/0.8(White)		
	Heat exchanger		Plate fin coil		
	Fan(drive) × No.		Line flow (direct) × 2		
	Fan motor output	kW	0.04		
	Airflow (Low-High)	m^3/min(CFM)	15 - 20(530-706)		
	External static pressure	Pa(mmAq)	0 (direct blow)		
	Booster heater	kW	—		
	Operation control & Thermostat		Wireless remote controller & Built-in		
	Noise level (Low-High) ※2	dB	39 - 45		
	Cond. drain conn. O.D.	mm(in.)	20 (13/16)		
	Dimensions W	mm(in.)	1,400 (55-1/8)		
	Dimensions D	mm(in.)	235 (9-1/4)		
	Dimensions H	mm(in.)	340 (13-3/8)		
	Weight	kg(lbs)	24 (53)		
OUTDOOR UNIT	**Service Ref.**		**PU-2.5VJA2**	**PU-2.5NJA1**	
	Power supply (phase, cycle, voltage)		Single, 50Hz, 220/240V	Single, 60Hz, 220V	
	Input	kW	2.46 / 2.52	2.91	3.44
	Running current (Power factor)	A(%)	11.4 / 10.7 (98/98)	13.4 (99)	15.8(99)
	Starting current	A	45 / 49	58	58
	External finish		Munsell 5Y 7/1		
	Refrigerant control		Capillary tube		
	Compressor		Hermetic		
	Model		NHJ41VMD	NHJ38NBD	
	Motor output	kW	2.0	1.7	
	Starter type		Line start		
	Protection devices		Inner thermostat, HP/LP switch		
	Heat exchanger		Plate fin coil		
	Fan(drive) × No.		Propeller (direct) × 1		
	Fan motor output	kW	0.085		
	Airflow	m^3/min(CFM)	50 (1765)		
	Defrost method		—		
	Noise level ※2	dB	52	53	
	Dimensions W	mm(in.)	870 (34-1/4)		
	Dimensions D	mm(in.)	295 (+24) (11-5/8 (add 1))		
	Dimensions H	mm(in.)	850 (33-7/16)		
	Weight	kg(lbs)	71 (157)		
REFRIGERANT PIPING	Crankcase heater	W	32 / 38	—	
	Refrigerant Charge	kg(lbs)	R-22 2.4 (5.3)	R-22 2.4 (5.3)	
	Pipe size O.D. Liquid	mm(in.)	9.52 (3/8)		
	Pipe size O.D. Gas	mm(in.)	15.88 (5/8)		
	Connection method Indoor side		Flared		
	Connection method Outdoor side		Flared		
	Between the indoor & outdoor units Height difference		※3 Max. 20m		
	Between the indoor & outdoor units Piping length		※3 Max. 30m		

※1 Refrigerant piping length (one way) : 5m (16ft)
※2 Noise level is measured in an unacoustic room based on JIS conditions.
※3 Up to 20m it is unnecessary to charge additional refrigerant.
※4 Indoor, Outdoor D.B./W.B. : 29/19°C, 46/24°C.
※5 Cooling SSA385, 386

Item \ Service Ref.			PK-3FLA2			
Indoor, Outdoor D.B./W.B.°C			27/19.0°C, 35/24°C			※4
Condition			Cooling (JIS B8616)			※5
Capacity ※1		Btu/h	24,600		27,300	23,500
		W	7,200		8,000	6,900
Total input ※1		kW	3.28 / 3.30	3.28 / 3.30	3.54	4.19
INDOOR UNIT	**Service Ref.**		**PK-3FLA2**			
	Power supply(phase, cycle,voltage)		Single, 50Hz, 220/240V		Single, 60Hz, 220V	
	Running current (Power factor) Input	kW	0.095 / 0.095		0.095	
	Running current (Power factor)	A(%)	0.44 / 0.44 (98/90)		0.44 (98)	
	Starting current	A	0.7 / 0.8		0.7	
	External finish		Munsell 3.4Y 7.7/0.8(White)			
	Heat exchanger		Plate fin coil			
	Fan(drive) × No.		Line flow (direct) × 2			
	Fan motor output	kW	0.04			
	Airflow (Low-High)	m³/min(CFM)	15 - 20 (530-706)			
	External static pressure	Pa(mmAq)	0 (direct blow)			
	Booster heater	kW	—			
	Operation control & Thermostat		Wireless remote controller & Built-in			
	Noise level (Low-High) ※2	dB	39 - 45			
	Cond. drain conn. O.D.	mm(in.)	20 (13/16)			
	Dimensions W	mm(in.)	1,400 (55-1/8)			
	Dimensions D	mm(in.)	235 (9-1/4)			
	Dimensions H	mm(in.)	340 (13-3/8)			
	Weight	kg(lbs)	24 (53)			
OUTDOOR UNIT	**Service Ref.**		**PU-3VJA2**	**PU-3YJA2** / **PU-3YJA3**	**PU-3NJA1**	
	Power supply (phase, cycle, voltage)		Single, 50Hz, 220/240V	Three, 50Hz, 380/415V	Single, 60Hz, 220V	
	Running current (Power factor) Input	kW	3.18 / 3.20	3.18 / 3.20	3.44	4.09
	Running current (Power factor)	A(%)	15.1/13.9(96/96)	5.7/5.3(85/84)	17.6(89)	20.9(89)
	Starting current	A	68 / 68	36 / 36	80	80
	External finish		Munsell 5Y 7/1			
	Refrigerant control		Capillary tube			
	Compressor		Hermetic			
	Model		NHJ52VND	NHJ52YDA / NHJ52YDE	NHJ47NAD	
	Motor output	kW	2.2	2.2	2.2	
	Starter type		Line start			
	Protection devices		※6	※7	※6	
	Heat exchanger		Plate fin coil			
	Fan(drive) × No.		Propeller (direct) × 1			
	Fan motor output	kW	0.085			
	Airflow	m³/min(CFM)	50 (1765)			
	Defrost method		—			
	Noise level ※2	dB	53		53	
	Dimensions W	mm(in.)	870 (34-1/4)			
	Dimensions D	mm(in.)	295 (+24) (11-5/8 (add 1))			
	Dimensions H	mm(in.)	850 (33-7/16)			
	Weight	kg(lbs)	73 (161)			
REFRIGERANT PIPING	Crankcase heater	W	32 / 38	32 / 38	38	
	Refrigerant Charge	kg(lbs)	R-22 3.08 (6.8)	R-22 2.88 (6.3)	R-22 3.5 (7.7)	
	Pipe size O.D. Liquid	mm(in.)	9.52 (3/8)			
	Pipe size O.D. Gas	mm(in.)	15.88 (5/8)			
	Connection method Indoor side		Flared			
	Connection method Outdoor side		Flared			
	Between the indoor & outdoor units Height difference		※3 Max. 20m			
	Between the indoor & outdoor units Piping length		※3 Max. 30m			

※1 Refrigerant piping length (one way) : 5m (16ft)
※2 Noise level is measured in an unacoustic room based on JIS conditions.
※3 Up to 20m it is unnecessary to charge additional refrigerant.
※4 Indoor, Outdoor D.B./W.B. : 29/19°C, 46/24°C
※5 Cooling SSA385, 386
※6 Inner thermostat, HP switch, LP switch.
※7 Thermal switch, Reversed-phase protector, HP switch, LP switch, Thermal relay.

Item \ Service Ref.			PK-3FLA3 PK-3FLA4 PK-3FLA5			
Indoor, Outdoor D.B./W.B.°C			27/19°C , 35/24°C			※4
Condition			Cooling (JIS B8616)			※5
Capacity ※1		Btu/h	27,000		27,300	23,500
		W	7,900		8,000	6,900
Total input ※1		kW	3.28 / 3.30	3.28 / 3.30	3.54	4.19
INDOOR UNIT	**Service Ref.**		**PK-3FLA3 PK-3FLA4 PK-3FLA5**			
	Power supply(phase, cycle,voltage)		Single, 50Hz, 220/240V		Single, 60Hz, 220V	
	Running current (Power factor) Input	kW	0.095 / 0.095		0.095	
	Running current (Power factor)	A(%)	0.44 / 0.44 (98/90)		0.44 (98)	
	Starting current	A	0.7 / 0.8		0.7	
	External finish		Munsell 3.4Y 7.7/0.8(White)			
	Heat exchanger		Plate fin coil			
	Fan(drive) × No.		Line flow (direct) × 2			
	Fan motor output	kW	0.04			
	Airflow (Low-High)	m^3/min(CFM)	15 - 20 (530-706)			
	External static pressure	Pa,mmAq	0 (direct blow)			
	Booster heater	kW	—			
	Operation control & Thermostat		Wireless remote controller & Built-in			
	Noise level (Low-High) ※2	dB	39 - 45			
	Unit drain pipe O.D.	mm(in.)	20 (13/16)			
	Dimensions W	mm(in.)	1,400 (55-1/8)			
	Dimensions D	mm(in.)	235 (9-1/4)			
	Dimensions H	mm(in.)	340 (13-3/8)			
	Weight	kg(lbs)	24 (53)			
OUTDOOR UNIT	**Service Ref.**		**PU-3VJC**	**PU-3YJC**	**PU-3NJA1**	
	Power supply (phase, cycle, voltage)		Single, 50Hz, 220/240V	Three, 50Hz, 380/415V	Single, 60Hz, 220V	
	Input	kW	3.18 / 3.20	3.18 / 3.20	3.44	4.09
	Running current (Power factor)	A(%)	15.1/13.9(96/96)	5.7/5.3(85/84)	17.6(89)	20.9(89)
	Starting current	A	54 / 58	34 / 37	80	80
	External finish		Munsell 5Y 7/1			
	Refrigerant control		Capillary tube			
	Compressor		Hermetic			
	Model		NH52VND	NH52YDE	NHJ47NAD	
	Motor output	kW	2.2	2.4	2.2	
	Starter type		Line start			
	Protection devices		※6	※7	※6	
	Heat exchanger		Plate fin coil			
	Fan(drive) × No.		Propeller (direct) × 1			
	Fan motor output	kW	0.085			
	Airflow	m^3/min(CFM)	50 (1765)			
	Defrost method		—			
	Noise level ※2	dB	52		53	
	Dimensions W	mm(in.)	870 (34-1/4)			
	Dimensions D	mm(in.)	295 (+24) (11-5/8 (add 1))			
	Dimensions H	mm(in.)	850 (33-7/16)			
	Weight	kg(lbs)	73 (161)			
REFRIGERANT PIPING	Crankcase heater	W	32 / 38	32 / 38	38	
	Refrigerant Charge	kg(lbs)	R-22 2.8(6.2)		R-22 3.5 (7.7)	
	Pipe size O.D. Liquid	mm(in.)	9.52 (3/8)			
	Pipe size O.D. Gas	mm(in.)	15.88 (5/8)			
	Connection method Indoor side		Flared			
	Connection method Outdoor side		Flared			
	Between the indoor & outdoor units Height difference		※3 Max. 20m			
	Between the indoor & outdoor units Piping length		※3 Max. 30m			

※1 Refrigerant piping length (one way) : 5m (16ft)
※2 Noise level is measured in an unacoustic room based on JIS conditions.
※3 Up to 20m it is unnecessary to charge additional refrigerant.
※4 Indoor, Outdoor D.B./W.B. : 29/19°C, 46/24°C
※5 Cooling SSA385, 386
※6 Inner thermostat, HP switch, LP switch.
※7 Thermal switch, Reversed-phase protector, HP switch, LP switch, Thermal relay.

Item \ Service Ref.				PK-3FLA2 PK-3FLA3 PK-3FLA4 PK-3FLA5	
Indoor, Outdoor D.B./W.B.°C				27/19°C , 35/24°C	
Condition				Cooling (JIS B8616)	
Capacity ※1			Btu/h	25,600	
			W	7,500	
Total input ※1			kW	2.75	
INDOOR UNIT	**Service Ref.**			**PK-3FLA2 PK-3FLA3 PK-3FLA4 PK-3FLA5**	
	Power supply(phase, cycle,voltage)			Single, 50Hz, 220V	
	Running current (Power factor)	Input	kW	0.095	
			A(%)	0.44 (98)	
		Starting current	A	0.7	
	External finish			Munsell 3.4Y 7.7/0.8(White)	
	Heat exchanger			Plate fin coil	
	Fan(drive) × No.			Line flow (direct) × 2	
	Fan motor output		kW	0.04	
	Airflow (Low-High)		m^3/min(CFM)	15 - 20 (530-706)	
	External static pressure		Pa,mmAq	0 (direct blow)	
	Booster heater		kW	—	
	Operation control & Thermostat			Wireless remote controller & Built-in	
	Noise level (Low-High) ※2		dB	39 - 45	
	Unit drain pipe O.D.		mm(in.)	20 (13/16)	
	Dimensions	W	mm(in.)	1,400 (55-1/8)	
		D	mm(in.)	235 (9-1/4)	
		H	mm(in.)	340 (13-3/8)	
	Weight		kg(lbs)	24 (53)	
OUTDOOR UNIT	**Service Ref.**			**PU-3VJB**	**PU-3YJB**
	Power supply (phase, cycle, voltage)			Single, 50Hz, 220V	Three, 50Hz, 380V
	Running current /Power factor	Input	kW	2.65	2.65
			A(%)	12.4(97)	4.2(97)
		Starting current	A	54	34
	External finish			Munsell 5Y 7/1	
	Refrigerant control			Capillary tube	
	Compressor			Hermetic	
		Model		NH47VNHT	NH47YDNT
		Motor output	kW	2.2	2.2
		Starter type		Line start	
		Protection devices		※6	※7
	Heat exchanger			Plate fin coil	
		Fan(drive) × No.		Propeller (direct) × 1	
		Fan motor output	kW	0.085	
		Airflow	m^3/min(CFM)	50 (1765)	
	Defrost method			—	
	Noise level ※2		dB	52	
	Dimensions	W	mm(in.)	870 (34-1/4)	
		D	mm(in.)	295 (+24) (11-5/8 (add 1))	
		H	mm(in.)	850 (33-7/16)	
	Weight		kg(lbs)	73 (161)	
REFRIGERANT PIPING	Crankcase heater		W	32	32
	Refrigerant Charge		kg(lbs)	R-22 3.0(6.6)	
	Pipe size O.D.	Liquid	mm(in.)	9.52 (3/8)	
		Gas	mm(in.)	15.88 (5/8)	
	Connection method	Indoor side		Flared	
		Outdoor side		Flared	
	Between the indoor & outdoor units	Height difference		※3 Max. 20m	
		Piping length		※3 Max. 30m	

※1 Refrigerant piping length (one way) : 5m (16ft)
※2 Noise level is measured in an unacoustic room based on JIS conditions.
※3 Up to 20m it is unnecessary to charge additional refrigerant.
※4 Indoor, Outdoor D.B./W.B. : 29/19°C, 46/24°C
※5 Cooling SSA385, 386
※6 Inner thermostat, HP switch, LP switch.
※7 Thermal switch, Reversed-phase protector, HP switch, LP switch, Thermal relay.

Item \ Service Ref.			PK-4FLSA2 PK-4FLSA3 PK-4FLSA4			
Indoor, Outdoor DB/WB°C			27/19.0°C, 35/24°C			※4
Condition			Cooling (JIS B8616)			※5
Capacity ※1		Btu/h	33,400		37,500	33,800
		W	9,800		11,000	9,900
Total input ※1		kW	3.46 / 3.63	3.40 / 3.47	4.38	5.08
INDOOR UNIT	**Service Ref.**		**PK-4FLSA2 PK-4FLSA3 PK-4FLSA4**			
	Power supply(phase, cycle,voltage)		Single, 50Hz, 220/240V		Single, 60Hz, 220V	
	Running current (Power factor) Input	kW	0.114 / 0.114		0.114	
	Running current (Power factor)	A(%)	0.53 / 0.53 (98/90)		0.53 (98)	
	Starting current	A	0.8 / 0.9		0.8	
	External finish		Munsell 3.4Y 7.7/0.8(White)			
	Heat exchanger		Plate fin coil			
	Fan(drive) × No.		Line flow (direct) × 2			
	Fan motor output	kW	0.07			
	Airflow (Low-High)	m^3/min(CFM)	22 - 28 (777 - 989)			
	External static pressure	Pa(mmAq)	0 (direct blow)			
	Booster heater	kW	—			
	Operation control & Thermostat		Wireless remote controller & Built-in			
	Noise level (Low-High) ※2	dB	41 - 46			
	Cond. drain conn. O.D.	mm(in.)	20 (13/16)			
	Dimensions W	mm(in.)	1,680 (66-1/8)			
	Dimensions D	mm(in.)	235 (9-1/4)			
	Dimensions H	mm(in.)	340 (13-3/8)			
	Weight	kg(lbs)	28 (62)			
OUTDOOR UNIT	**Service Ref.**		**PU-4VLJSA2**	**PU-4YJSA2**	**PU-4YJSA3**	**PU-4TJSA2**
	Power supply (phase, cycle, voltage)		Single, 50Hz, 220/240V	Three, 50Hz, 380/415V		3, 60Hz, 220V
	Running current (Power factor) Input	kW	3.35 / 3.52	3.29 / 3.36		4.27 / 4.97
	Running current (Power factor)	A(%)	16.9 / 16.3 (90/90)	5.7 / 5.5 (87/85)		12.2 (92) / 14.0(93)
	Starting current	A	79 / 79	38 / 38		69 / 69
	External finish		Munsell 5Y 7/1			
	Refrigerant control		Capillary tube			
	Compressor		Hermetic			
	Model		NH56VND	NHJ56YDA	NHJ56YDE	NHJ56TKA
	Motor output	kW	2.7	2.7		2.7
	Starter type		Line start			
	Protection devices		※6	※7		※7
	Heat exchanger		Plate fin coil			
	Fan(drive) × No.		Propeller (direct) × 2			
	Fan motor output	kW	0.065 + 0.065			
	Airflow	m^3/min(CFM)	95 (3352)			
	Defrost method		—			
	Noise level ※2	dB	54	55		55
	Dimensions W	mm(in.)	870 (34-1/4)			
	Dimensions D	mm(in.)	295 (+24) (11-5/8 (add 1))			
	Dimensions H	mm(in.)	1258 (49-1/2)			
	Weight	kg(lbs)	94 (207)			
REFRIGERANT PIPING	Crankcase heater	W	32 / 38	32 / 38		38
	Refrigerant Charge	kg(lbs)	R-22 3.8 (8.4)	R-22 4.6 (10.1)		R-22 4.6 (10.1)
	Pipe size O.D. Liquid	mm(in.)	9.52 (3/8)			
	Pipe size O.D. Gas	mm(in.)	19.05 (4/3)			
	Connection method Indoor side		Flared			
	Connection method Outdoor side		Flared			
	Between the indoor & outdoor units Height difference		※3 Max. 30m			
	Between the indoor & outdoor units Piping length		※3 Max. 40m			

※1 Refrigerant piping length (one way) : 5m (16ft)
※2 Noise level is measured in an unacoustic room based on JIS conditions.
※3 Up to 20m it is unnecessary to charge additional refrigerant.
※4 Indoor, Outdoor D.B./W.B. : 29/19°C, 46/24°C
※5 Cooling SSA385, 386
※6 Inner thermostat, HP switch, LP switch.
※7 Thermal switch, Reversed-phase protector, HP switch, LP switch, Thermal relay.

2. POWER SUPPLY & MODEL NAMES

Power supply		Service Ref. (Indoor unit)	Service Ref. (Outdoor unit)					
			PK-1.6FLA$_3$	**PK-2FLA$_3$**	**PK-2.5FLA$_2$ PK-2.5FLA$_3$ PK-2.5FLA$_4$**	**PK-3FLA$_2$**	**PK-3FLA$_3$ PK-3FLA$_4$ PK-3FLA$_5$**	**PK-4FLSA$_2$ PK-4FLSA$_3$ PK-4FLSA$_4$**
50Hz	1ph	220,230,240V	PU-1.6VLJA$_2$	PU-2VJA$_2$	PU-2.5VJA$_2$	PU-3VJA$_2$ PU-3VJB	PU-3VJC PU-3VJB	PU-4VLJSA$_2$
	3ph	380/220,400/230,415/240V	—	—	—	PU-3YJA$_3$ PU-3YJB	PU-3YJC PU-3YJB	PU-4YJSA$_3$
60Hz	1ph	220V	—	PU-2NJA$_1$	PU-2.5NJA$_1$	PU-3NJA$_1$	PU-3NJA$_1$	—
	3ph	220V	—	—	—	—	—	PU-4TJSA$_2$

Notes : 1. Power supply key N ····· 1ph, 220V, 60Hz
V(L) ··· 1ph, 220, 230 240V, 50Hz
T ····· 3ph, 220V, 60Hz
Y ··· 3ph, 380/220, 400/230, 415/240V, 50Hz, 4 wires
2. Primary power supplies for all indoor units are single-phase.

3. ELECTRICAL SPECIFICATION

(1) Rating conditions ——— JIS B8615, 8616
Indoor : D.B. 27°C (80°F), W.B. 19°C(66°F)
Outdoor : D.B. 35°C (95°F)

Series PK Indoor Unit (Single Phase)

Power supply (1 Phase)		V : 220V 50Hz						V : 230V 50Hz					
Service Ref.		**PK-1.6FLA$_3$**	**PK-2FLA$_3$**	**PK-2.5FLA$_2$ PK-2.5FLA$_3$ PK-2.5FLA$_4$**	**PK-3FLA$_2$**	**PK-3FLA$_3$ PK-3FLA$_4$ PK-3FLA$_5$**	**PK-4FLSA$_2$ PK-4FLSA$_3$ PK-4FLSA$_4$**	**PK-1.6FLA$_3$**	**PK-2FLA$_3$**	**PK-2.5FLA$_2$ PK-2.5FLA$_3$ PK-2.5FLA$_4$**	**PK-3FLA$_2$**	**PK-3FLA$_3$ PK-3FLA$_4$ PK-3FLA$_5$**	**PK-4FLSA$_2$ PK-4FLSA$_3$ PK-4FLSA$_4$**
Current	A	0.32	0.37	0.44	0.44	0.44	0.53	0.32	0.37	0.44	0.44	0.44	0.53
Input	kW	0.07	0.08	0.095	0.095	0.095	0.114	0.07	0.08	0.095	0.095	0.095	0.114
Starting current	A	0.4	0.4	0.7	0.7	0.7	0.8	0.4	0.4	0.8	0.8	0.8	0.8
Outdoor unit		PU-1.6	PU-2	PU-2.5	PU-3	PU-3	PU-4	PU-1.6	PU-2	PU-2.5	PU-3	PU-3	PU-4

Power supply (1 Phase)		V : 240V 50Hz						N : 220V 50Hz				
Service Ref.		**PK-1.6FLA$_3$**	**PK-2FLA$_3$**	**PK-2.5FLA$_2$ PK-2.5FLA$_3$ PK-2.5FLA$_4$**	**PK-3FLA$_2$**	**PK-3FLA$_3$ PK-3FLA$_4$ PK-3FLA$_5$**	**PK-4FLSA$_2$ PK-4FLSA$_3$ PK-4FLSA$_4$**	**PK-2FLA$_3$**	**PK-2.5FLA$_2$ PK-2.5FLA$_3$ PK-2.5FLA$_4$**	**PK-3FLA$_2$**	**PK-3FLA$_3$ PK-3FLA$_4$ PK-3FLA$_5$**	**PK-4FLSA$_2$ PK-4FLSA$_3$ PK-4FLSA$_4$**
Current	A	0.32	0.37	0.44	0.44	0.44	0.53	0.43	0.44	0.44	0.44	0.53
Input	kW	0.07	0.08	0.095	0.095	0.095	0.114	0.09	0.095	0.095	0.095	0.114
Starting current	A	0.4	0.4	0.8	0.8	0.8	0.8	0.5	0.7	0.7	0.7	0.8
Outdoor unit		PU-1.6	PU-2	PU-2.5	PU-3	PU-3	PU-4	PU-2	PU-2.5	PU-3	PU-3	PU-4

5 DATA

1. PERFORMANS DATA

COOLING CAPACITY 50Hz

※ Outdoor unit
PU-3JB

Service Ref.			PK-1.6FLA$_3$		PK-2FLA$_3$		PK-2.5FLA$_{3/4}$		PK-3FLA$_2$		PK-3FLA$_{3/4/5}$		PK-3FLA$_{2/3/4/5}$ ※		PK-4FLSA$_{2/3/4}$	
Temperature			T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)
Outdoor D.B.	Indoor W.B.															
21˚C (69.8˚ F)	16˚C	(60.8˚ F)	3.9	0.81	5.6	0.81	7.0	0.81	7.2	0.81	7.9	0.81	7.5	0.81	9.8	0.81
	18˚C	(64.4˚ F)	4.2	0.82	6.0	0.82	7.5	0.82	7.7	0.82	8.4	0.82	8.0	0.82	10.5	0.82
	19˚C	(66.2˚ F)	4.3	0.83	6.2	0.83	7.7	0.83	7.9	0.83	8.7	0.83	8.3	0.83	10.8	0.83
	19.4˚C	(67˚ F)	4.4	0.83	6.2	0.83	7.8	0.83	8.0	0.83	8.8	0.83	8.4	0.83	10.9	0.83
	20˚C	(68˚ F)	4.4	0.84	6.4	0.84	7.9	0.84	8.2	0.84	9.0	0.84	8.5	0.84	11.1	0.84
	22˚C	(71.6˚ F)	4.7	0.86	6.7	0.86	8.4	0.86	8.7	0.86	9.5	0.86	9.0	0.86	11.8	0.86
25˚C (77˚ F)	16˚C	(60.8˚ F)	3.8	0.84	5.5	0.84	6.9	0.84	7.1	0.84	7.8	0.84	7.4	0.84	9.6	0.84
	18˚C	(64.4˚ F)	4.1	0.85	5.9	0.85	7.3	0.85	7.5	0.85	8.3	0.85	7.8	0.85	10.2	0.85
	19˚C	(66.2˚ F)	4.2	0.86	6.0	0.86	7.6	0.86	7.8	0.86	8.5	0.86	8.1	0.86	10.6	0.86
	19.4˚C	(67˚ F)	4.3	0.86	6.1	0.86	7.7	0.86	7.9	0.86	8.6	0.86	8.2	0.86	10.7	0.86
	20˚C	(68˚ F)	4.3	0.87	6.2	0.87	7.8	0.87	8.0	0.87	8.8	0.87	8.4	0.87	10.9	0.87
	22˚C	(71.6˚ F)	4.6	0.89	6.6	0.89	8.3	0.89	8.5	0.89	9.4	0.89	8.9	0.89	11.6	0.89
30˚C (86˚ F)	16˚C	(60.8˚ F)	3.7	0.90	5.3	0.90	6.6	0.90	6.8	0.90	7.5	0.90	7.1	0.90	9.3	0.90
	18˚C	(64.4˚ F)	3.9	0.92	5.6	0.92	7.1	0.92	7.3	0.92	8.0	0.92	7.6	0.92	9.9	0.92
	19˚C	(66.2˚ F)	4.1	0.93	5.8	0.93	7.3	0.93	7.5	0.93	8.2	0.93	7.8	0.93	10.2	0.93
	19.4˚C	(67˚ F)	4.1	0.93	5.9	0.93	7.4	0.93	7.6	0.93	8.3	0.93	7.9	0.93	10.3	0.93
	20˚C	(68˚ F)	4.2	0.94	6.0	0.94	7.5	0.94	7.7	0.94	8.5	0.94	8.1	0.94	10.5	0.94
	22˚C	(71.6˚ F)	4.5	0.96	6.4	0.96	8.0	0.96	8.2	0.96	9.0	0.96	8.6	0.96	11.2	0.96
32.2˚C (90˚ F)	16˚C	(60.8˚ F)	3.6	0.93	5.2	0.93	6.5	0.93	6.7	0.93	7.3	0.93	7.0	0.93	9.1	0.93
	18˚C	(64.4˚ F)	3.9	0.95	5.5	0.95	6.9	0.95	7.1	0.95	7.8	0.95	7.4	0.95	9.7	0.95
	19˚C	(66.2˚ F)	4.0	0.96	5.7	0.96	7.2	0.96	7.4	0.96	8.1	0.96	7.7	0.96	10.0	0.96
	19.4˚C	(67˚ F)	4.0	0.97	5.8	0.97	7.3	0.97	7.5	0.97	8.2	0.97	7.8	0.97	10.2	0.97
	20˚C	(68˚ F)	4.1	0.97	5.9	0.97	7.4	0.97	7.6	0.97	8.3	0.97	7.9	0.97	10.3	0.97
	22˚C	(71.6˚ F)	4.4	0.99	6.3	0.99	7.9	0.99	8.1	0.99	8.9	0.99	8.4	0.99	11.0	0.99
35˚C (95˚ F)	16˚C	(60.8˚ F)	3.5	0.96	5.1	0.96	6.3	0.96	6.5	0.96	7.2	0.96	6.8	0.96	8.9	0.96
	18˚C	(64.4˚ F)	3.8	0.99	5.4	0.99	6.8	0.99	7.0	0.99	7.6	0.99	7.3	0.99	9.5	0.99
	19˚C	(66.2˚ F)	3.9	1.00	5.6	1.00	7.0	1.00	7.2	1.00	7.9	1.00	7.5	1.00	9.8	1.00
	19.4˚C	(67˚ F)	4.0	1.00	5.7	1.00	7.1	1.00	7.3	1.00	8.0	1.00	7.6	1.00	9.9	1.00
	20˚C	(68˚ F)	4.0	1.01	5.8	1.01	7.2	1.01	7.4	1.01	8.2	1.01	7.7	1.01	10.1	1.01
	22˚C	(71.6˚ F)	4.3	1.04	6.2	1.04	7.7	1.04	7.9	1.04	8.7	1.04	8.3	1.04	10.8	1.04
40˚C (104˚ F)	16˚C	(60.8˚ F)	3.4	1.03	4.9	1.03	6.1	1.03	6.2	1.03	6.8	1.03	6.5	1.03	8.5	1.03
	18˚C	(64.4˚ F)	3.6	1.06	5.2	1.06	6.5	1.06	6.7	1.06	7.3	1.06	6.9	1.06	9.1	1.06
	19˚C	(66.2˚ F)	3.7	1.07	5.4	1.07	6.7	1.07	6.9	1.07	7.6	1.07	7.2	1.07	9.4	1.07
	19.4˚C	(67˚ F)	3.8	1.08	5.4	1.08	6.8	1.08	7.0	1.08	7.7	1.08	7.3	1.08	9.5	1.08
	20˚C	(68˚ F)	3.9	1.08	5.5	1.08	6.9	1.08	7.1	1.08	7.8	1.08	7.4	1.08	9.7	1.08
	22˚C	(71.6˚ F)	4.1	1.11	5.9	1.11	7.4	1.11	7.6	1.11	8.3	1.11	7.9	1.11	10.3	1.11
40.6˚C (105˚ F)	16˚C	(60.8˚ F)	3.4	1.04	4.8	1.04	6.0	1.04	6.2	1.04	6.8	1.04	6.5	1.04	8.4	1.04
	18˚C	(64.4˚ F)	3.6	1.06	5.2	1.06	6.4	1.06	6.6	1.06	7.3	1.06	6.9	1.06	9.0	1.06
	19˚C	(66.2˚ F)	3.7	1.08	5.3	1.08	6.7	1.08	6.9	1.08	7.5	1.08	7.1	1.08	9.3	1.08
	19.4˚C	(67˚ F)	3.8	1.08	5.4	1.08	6.8	1.08	6.9	1.08	7.6	1.08	7.2	1.08	9.5	1.08
	20˚C	(68˚ F)	3.8	1.09	5.5	1.09	6.9	1.09	7.1	1.09	7.8	1.09	7.4	1.09	9.6	1.09
	22˚C	(71.6˚ F)	4.1	1.12	5.9	1.12	7.4	1.12	7.6	1.12	8.3	1.12	7.9	1.12	10.3	1.12
45˚C (113˚ F)	16˚C	(60.8˚ F)	3.2	1.10	4.6	1.10	5.8	1.10	5.9	1.10	6.5	1.10	6.2	1.10	8.1	1.10
	18˚C	(64.4˚ F)	3.4	1.12	4.9	1.12	6.2	1.12	6.4	1.12	7.0	1.12	6.6	1.12	8.6	1.12
	19˚C	(66.2˚ F)	3.6	1.14	5.1	1.14	6.4	1.14	6.6	1.14	7.2	1.14	6.8	1.14	8.9	1.14
	19.4˚C	(67˚ F)	3.6	1.15	5.2	1.15	6.5	1.15	6.7	1.15	7.3	1.15	6.9	1.15	9.1	1.15
	20˚C	(68˚ F)	3.7	1.16	5.3	1.16	6.6	1.16	6.8	1.16	7.5	1.16	7.1	1.16	9.3	1.16
	22˚C	(71.6˚ F)	3.9	1.20	5.7	1.20	7.1	1.20	7.3	1.20	8.0	1.20	7.6	1.20	9.9	1.20
46˚C (115˚ F)	16˚C	(60.8˚ F)	3.2	1.11	4.6	1.11	5.7	1.11	5.9	1.11	6.4	1.11	6.1	1.11	8.0	1.11
	18˚C	(64.4˚ F)	3.4	1.14	4.9	1.14	6.1	1.14	6.3	1.14	6.9	1.14	6.5	1.14	8.6	1.14
	19˚C	(66.2˚ F)	3.5	1.15	5.1	1.15	6.3	1.15	6.5	1.15	7.1	1.15	6.8	1.15	8.9	1.15
	19.4˚C	(67˚ F)	3.6	1.16	5.1	1.16	6.4	1.16	6.6	1.16	7.2	1.16	6.9	1.16	9.0	1.16
	20˚C	(68˚ F)	3.6	1.17	5.2	1.17	6.5	1.17	6.7	1.17	7.4	1.17	7.0	1.17	9.2	1.17
	22˚C	(71.6˚ F)	3.9	1.21	5.6	1.21	7.0	1.21	7.2	1.21	7.9	1.21	7.5	1.21	9.8	1.21
50˚C (69.8˚ F)	16˚C	(60.8˚ F)			4.4	1.16	5.5	1.16	5.6	1.16	6.2	1.16			7.6	1.16
	18˚C	(64.4˚ F)			4.7	1.19	5.9	1.19	6.0	1.19	6.6	1.19			8.2	1.19
	19˚C	(66.2˚ F)			4.9	1.21	6.1	1.21	6.2	1.21	6.9	1.21			8.5	1.21
	19.4˚C	(67˚ F)			4.9	1.22	6.2	1.22	6.3	1.22	6.9	1.22			8.6	1.22
	20˚C	(68˚ F)			5.0	1.23	6.3	1.23	6.5	1.23	7.1	1.23			8.8	1.23
	22˚C	(71.6˚ F)			5.4	1.28	6.7	1.28	6.9	1.28	7.6	1.28			9.4	1.28
52˚C (125.5˚ F)	16˚C	(60.8˚ F)			4.3	1.19	5.3	1.19	5.5	1.19	6.0	1.19			7.4	1.19
	18˚C	(64.4˚ F)			4.6	1.22	5.7	1.22	5.9	1.22	6.5	1.22			8.0	1.22
	19˚C	(66.2˚ F)			4.7	1.24	5.9	1.24	6.1	1.24	6.7	1.24			8.3	1.24
	19.4˚C	(67˚ F)			4.8	1.25	6.0	1.25	6.2	1.25	6.8	1.25			8.4	1.25
	20˚C	(68˚ F)			4.9	1.26	6.1	1.26	6.3	1.26	6.9	1.26			8.6	1.26
	22˚C	(71.6˚ F)			5.3	1.31	6.6	1.31	6.8	1.31	7.4	1.31			9.2	1.31
Evaporator airflow (CMM)			13		14		20		20		20		20		28	
Bypass factors			0.18		0.16		0.11		0.12		0.12		0.12		0.12	
S.H.F. at rating conditions			0.81		0.73		0.81		0.76		0.73		0.75		0.73	

Notes: 1. T.C.: Total capacity (kW) ··· (kcal/h)=(kW)x860, (Btu/h)=4x(kW)x860
C.F.(T.I.) : Correction factors of Total input(Indoor unit input + Outdoor unit input)
2. (°F)=32+9/5(°C)
3. Guaranteed operating range(cooling) { **Lower limit … Indoor : D.B. 21°C(70°F), W.B. 15.5°C(60°F), Outdoor : D.B. 21°C(70°F).**
Upper limit … Indoor : D.B. 35°C(95°F), W.B. 22.5°C(72.5°F), Outdoor : D.B. 46°C(115°F)…VLJ, VJB, YJB. ※
※ Outdoor : D.B. 52°C(125.5°F)…VJA, YJA.

COOLING CAPACITY correction factors 50Hz

Service Ref.	Refrigerant piping length (one way)							
	5m (16ft)	10m (33ft)	15m (49ft)	20m (66ft)	25m (82ft)	30m (98ft)	35m (115ft)	40m (13ft)
PK-1.6FLA$_3$	1.0	0.992	0.987	0.982	—	—	—	—
PK-2FLA$_3$	1.0	0.985	0.975	0.964	0.954	0.944	—	—
PK-2.5FLA$_{2/3/4}$	1.0	0.983	0.972	0.961	0.951	0.940	—	—
PK-3FLA$_{2/3/4/5}$	1.0	0.978	0.962	0.948	0.934	0.921	—	—
PK-4FLSA$_{2/3/4}$	1.0	0.984	0.974	0.964	0.954	0.944	0.914	0.902

COOLING CAPACITY 60Hz

Service Ref.		PK-2FLA3		PK-2.5FLA3/4		PK-3FLA2/3/4/5		PK-4FLSA2/3/4	
Temperature		T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)
Outdoor D.B.	Indoor W.B.								
21˚C (69.8˚ F)	16˚C (60.8˚ F)	5.5	0.81	7.2	0.81	8.0	0.81	11.0	0.81
	18˚C (64.4˚ F)	5.8	0.82	7.6	0.82	8.6	0.82	11.8	0.82
	19˚C (66.2˚ F)	6.0	0.83	7.9	0.83	8.8	0.83	12.1	0.83
	19.4˚C (67˚ F)	6.1	0.83	8.0	0.83	8.9	0.83	12.3	0.83
	20˚C (68˚ F)	6.2	0.84	8.1	0.84	9.1	0.84	12.5	0.84
	22˚C (71.6˚ F)	6.6	0.86	8.6	0.86	9.6	0.86	13.2	0.86
25˚C (77˚ F)	16˚C (60.8˚ F)	5.3	0.84	7.0	0.84	7.8	0.84	10.8	0.84
	18˚C (64.4˚ F)	5.7	0.85	7.5	0.85	8.4	0.85	11.5	0.85
	19˚C (66.2˚ F)	5.9	0.86	7.7	0.86	8.6	0.86	11.9	0.86
	19.4˚C (67˚ F)	6.0	0.86	7.8	0.86	8.7	0.86	12.0	0.86
	20˚C (68˚ F)	6.1	0.87	8.0	0.87	8.9	0.87	12.2	0.87
	22˚C (71.6˚ F)	6.5	0.89	8.5	0.89	9.5	0.89	13.0	0.89
30˚C (86˚ F)	16˚C (60.8˚ F)	5.2	0.90	6.8	0.90	7.6	0.90	10.4	0.90
	18˚C (64.4˚ F)	5.5	0.92	7.2	0.92	8.1	0.92	11.1	0.92
	19˚C (66.2˚ F)	5.7	0.93	7.4	0.93	8.3	0.93	11.4	0.93
	19.4˚C (67˚ F)	5.7	0.93	7.5	0.93	8.4	0.93	11.6	0.93
	20˚C (68˚ F)	5.9	0.94	7.7	0.94	8.6	0.94	11.8	0.94
	22˚C (71.6˚ F)	6.2	0.96	8.2	0.96	9.1	0.96	12.6	0.96
32.2˚C (90˚ F)	16˚C (60.8˚ F)	5.1	0.93	6.6	0.93	7.4	0.93	10.2	0.93
	18˚C (64.4˚ F)	5.4	0.95	7.1	0.95	7.9	0.95	10.9	0.95
	19˚C (66.2˚ F)	5.6	0.96	7.3	0.96	8.2	0.96	11.3	0.96
	19.4˚C (67˚ F)	5.6	0.97	7.4	0.97	8.3	0.97	11.4	0.97
	20˚C (68˚ F)	5.8	0.97	7.5	0.97	8.4	0.97	11.6	0.97
	22˚C (71.6˚ F)	6.1	0.99	8.0	0.99	9.0	0.99	12.4	0.99
35˚C (95˚ F)	16˚C (60.8˚ F)	4.9	0.96	6.5	0.96	7.3	0.96	10.0	0.96
	18˚C (64.4˚ F)	5.3	0.99	6.9	0.99	7.7	0.99	10.6	0.99
	19˚C (66.2˚ F)	5.5	1.00	7.2	1.00	8.0	1.00	11.0	1.00
	19.4˚C (67˚ F)	5.5	1.00	7.2	1.00	8.1	1.00	11.1	1.00
	20˚C (68˚ F)	5.6	1.01	7.4	1.01	8.3	1.01	11.4	1.01
	22˚C (71.6˚ F)	6.0	1.04	7.9	1.04	8.8	1.04	12.1	1.04
40˚C (104˚ F)	16˚C (60.8˚ F)	4.7	1.03	6.2	1.03	6.9	1.03	9.5	1.03
	18˚C (64.4˚ F)	5.0	1.06	6.6	1.06	7.4	1.06	10.2	1.06
	19˚C (66.2˚ F)	5.2	1.07	6.8	1.07	7.7	1.07	10.5	1.07
	19.4˚C (67˚ F)	5.3	1.08	6.9	1.08	7.8	1.08	10.7	1.08
	20˚C (68˚ F)	5.4	1.08	7.1	1.08	7.9	1.08	10.9	1.08
	22˚C (71.6˚ F)	5.8	1.11	7.5	1.11	8.4	1.11	11.6	1.11
40.6˚C (105˚ F)	16˚C (60.8˚ F)	4.7	1.04	6.2	1.04	6.9	1.04	9.5	1.04
	18˚C (64.4˚ F)	5.0	1.06	6.6	1.06	7.4	1.06	10.1	1.06
	19˚C (66.2˚ F)	5.2	1.08	6.8	1.08	7.6	1.08	10.5	1.08
	19.4˚C (67˚ F)	5.3	1.08	6.9	1.08	7.7	1.08	10.6	1.08
	20˚C (68˚ F)	5.4	1.09	7.0	1.09	7.9	1.09	10.8	1.09
	22˚C (71.6˚ F)	5.7	1.12	7.5	1.12	8.4	1.12	11.6	1.12
45˚C (113˚ F)	16˚C (60.8˚ F)	4.5	1.10	5.9	1.10	6.6	1.10	9.1	1.10
	18˚C (64.4˚ F)	4.8	1.12	6.3	1.12	7.1	1.12	9.7	1.12
	19˚C (66.2˚ F)	5.0	1.14	6.5	1.14	7.3	1.14	10.0	1.14
	19.4˚C (67˚ F)	5.0	1.15	6.6	1.15	7.4	1.15	10.2	1.15
	20˚C (68˚ F)	5.1	1.16	6.8	1.16	7.6	1.16	10.4	1.16
	22˚C (71.6˚ F)	5.5	1.20	7.2	1.20	8.1	1.20	11.1	1.20
46˚C (115˚ F)	16˚C (60.8˚ F)	4.4	1.11	5.8	1.11	6.5	1.11	9.0	1.11
	18˚C (64.4˚ F)	4.8	1.14	6.2	1.14	7.0	1.14	9.6	1.14
	19˚C (66.2˚ F)	4.9	1.15	6.5	1.15	7.2	1.15	9.9	1.15
	19.4˚C (67˚ F)	5.0	1.16	6.6	1.16	7.3	1.16	10.1	1.16
	20˚C (68˚ F)	5.1	1.17	6.7	1.17	7.5	1.17	10.3	1.17
	22˚C (71.6˚ F)	5.5	1.21	7.2	1.21	8.0	1.21	11.0	1.21
50˚C (69.8˚ F)	16˚C (60.8˚ F)	4.2	1.16	5.6	1.16	6.2	1.16	8.6	1.16
	18˚C (64.4˚ F)	4.6	1.19	6.0	1.19	6.7	1.19	9.2	1.19
	19˚C (66.2˚ F)	4.7	1.21	6.2	1.21	6.9	1.21	9.5	1.21
	19.4˚C (67˚ F)	4.8	1.22	6.3	1.22	7.0	1.22	9.7	1.22
	20˚C (68˚ F)	4.9	1.23	6.4	1.23	7.2	1.23	9.9	1.23
	22˚C (71.6˚ F)	5.2	1.28	6.9	1.28	7.7	1.28	10.6	1.28
52˚C (125.5˚ F)	16˚C (60.8˚ F)	4.1	1.19	5.4	1.19	6.1	1.19	8.4	1.19
	18˚C (64.4˚ F)	4.5	1.22	5.8	1.22	6.5	1.22	9.0	1.22
	19˚C (66.2˚ F)	4.6	1.24	6.1	1.24	6.8	1.24	9.3	1.24
	19.4˚C (67˚ F)	4.7	1.25	6.2	1.25	6.9	1.25	9.5	1.25
	20˚C (68˚ F)	4.8	1.26	6.3	1.26	7.0	1.26	9.7	1.26
	22˚C (71.6˚ F)	5.1	1.31	6.7	1.31	7.5	1.31	10.4	1.31
Evaporator airflow (CMM)		14		20		20		28	
Bypass factors		0.16		0.12		0.13		0.14	
S.H.F. at rating conditions		0.73		0.78		0.78		0.73	

Notes: 1. T.C.: Total capacity (kW) ··· (kcal/h)=(kW)x860, (Btu/h)=4x(kW)x860
C.F.(T.I.) : Correction factors of Total input(Indoor unit input + Outdoor unit input)
2. (°F)=32+9/5(°C)
3. Guaranteed operating range(cooling) { **Lower limit … Indoor : D.B. 21°C(70°F), W.B. 15.5°C(60°F), Outdoor : D.B. 21°C(70°F).**
Upper limit … Indoor : D.B. 35°C(95°F), W.B. 22.5°C(72.5°F), Outdoor : D.B. 52°C(125.5°F).

COOLING CAPACITY correction factors 60Hz

Service Ref.	Refrigerant piping length (one way)							
	5m (16ft)	10m (33ft)	15m (49ft)	20m (66ft)	25m (82ft)	30m (98ft)	35m (115ft)	40m (131ft)
PK-2FLA3	1.0	0.985	0.975	0.964	0.954	0.944	—	—
PK-2.5FLA2/3/4	1.0	0.978	0.963	0.948	0.934	0.921	—	—
PK-3FLA2/3/4/5	1.0	0.971	0.950	0.931	0.913	0.896	—	—
PK-4FLSA2/3/4	1.0	0.980	0.966	0.952	0.939	0.926	0.941	0.902

2. STANDARD OPERATION DATA

Service Ref.			PK-1.6 FLA3	PK-2FLA3		PK-2.5FLA2 PK-2.5FLA3 PK-2.5FLA4		PK-3FLA2		PK-3FLA3 PK-3FLA4 PK-3FLA5		PK-3FLA2 PK-3FLA3 PK-3FLA4 PK-3FLA5	PK-4FLSA2 PK-4FLSA3 PK-4FLSA4	
MODE			Cooling	Cooling	Cooling	Cooling	Cooling	Cooling	Cooling	Cooling	Cooling	Cooling	Cooling	Cooling
Total	Capacity	W	3900	5600	4600	7000	6650	7200	6900	7900	6900	7500	9800	9900
	Input	kW	1.49	2.52	2.60	2.56	3.54	3.28	4.19	3.28	4.19	3.28	3.46	5.08
Electrical circuit	**Indoor unit Service Ref.**		**PK-1.6 FLA3**	**PK-2FLA3**		**PK-2.5FLA2 PK-2.5FLA3 PK-2.5FLA4**		**PK-3FLA2**		**PK-3FLA3 PK-3FLA4 PK-3FLA5**		**PK-3FLA2 PK-3FLA3 PK-3FLA4 PK-3FLA5**	**PK-4FLSA2 PK-4FLSA3 PK-4FLSA4**	
	Phase , Hz		1 , 50	1 , 50	1 , 60	1 , 50	1 , 60	1 , 50	1 , 60	1 , 50	1 , 60	1 , 50	1 , 50	1 , 60
	Volts		220	220	220	220	220	220	220	220	220	220	220	220
	Amperes		0.32	0.37	0.42	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.53	0.53
	Outdoor unit Service Ref.		**PU-1.6 VLJA2**	**PU-2 VJA2**	**PU-2 NJA1**	**PU-2.5 VJA2**	**PU-2.5 NJA1**	**PU-3 VJA2**	**PU-3 NJA1**	**PU-3 VJC**	**PU-3 NJA1**	**PU-3 VJB**	**PU-4 YJSA3**	**PU-4 TJSA3**
	Phase , Hz		1 , 50	1 , 50	1 , 60	1 , 50	1 , 60	1 , 50	1 , 60	1 , 50	1 , 60	1 , 50	3 , 50	3 , 60
	Volts		220	220	220	220	220	220	220	220	220	220	220	220
	Amperes		6.7	11.3	13.6	11.4	15.8	15.1	20.9	15.1	20.9	12.4	5.7	14.0
Refrigerant circuit	Discharge pressure	Mpa (kg/cm²)	1.89 (19.3)	1.98 (20.2)	1.96 (20.0)	2.05 (20.9)	2.13 (21.7)	1.99 (20.3)	2.07 (21.1)	1.99 (20.3)	2.07 (21.1)	1.94 (19.8)	1.80 (18.4)	1.93 (19.7)
	Suction pressure	Mpa (kg/cm²)	0.5 (5.1)	0.46 (4.69)	0.47 (4.79)	0.47 (4.79)	0.44 (4.49)	0.47 (4.79)	0.44 (4.49)	0.47 (4.79)	0.44 (4.49)	0.48 (4.85)	0.48 (4.89)	0.45 (4.59)
	Discharge temperature	˚C	84	66	66	74.3	87	62	70	86	70	76	65	74
	Condensing temperature	˚C	50	52	52	52	54	51	53	51	53	51.4	49	52
	Suction temperature	˚C	9	3	5	10.3	10	6	4	6	4	5	6	5
	Refrigerant pipe length	m	5	5	5	5	5	5	5	5	5	5	5	5
Indoor side	Intake air temperature	D.B.˚C	27	27	29	27	29	27	29	27	29	27	27	29
		W.B.˚C	19	19	19	19	19	19	19	19	19	19	19	19
	Discharge air temperature	D.B.˚C	15.4	13.4	13.5	14.1	14.1	13.7	13.2	13.0	13.2	13.4	13.9	13.2
Outdoor side	Intake air temperature	D.B.˚C	35	35	46	35	46	35	46	35	46	35	35	46
		W.B.˚C	24	24	24	24	24	24	24	24	24	24	24	24

Total Electrical circuit Refrigerant circuit Indoor side Outdoor side

The unit of pressure has been changed to Mpa on the international system of unit(SI unit system).
The converted score against the traditional unit system can be gotten according to the formula below.
1(Mpa)=10.2(O/F·G)

3. ADDITIONAL REFRIGERANT CHARGE (R-22…kg(lbs))

Service Ref.	Outdoor unit precharged (kg) (up to 20m)	Refrigerant piping length (one way)				
		20m (66ft)	25m (82ft)	30m (98ft)	35m (115ft)	40m (131ft)
PK-1.6FLA3	VL---1.3,	0	—	—	—	—
PK-2FLA3	V---1.79, N---1.9	0	0.06(0.13)	0.12(0.26)	—	—
PK-2.5FLA2/3/4	V---2.4, N---2.4	0	0.06(0.13)	0.12(0.26)	—	—
PK-3FLA2	V---3.08, Y---2.88, N---3.5	0	0.06(0.13)	0.12(0.26)	—	—
PK-3FLA3/4/5	V---2.8, Y---2.8, N---3.5	0	0.06(0.13)	0.12(0.26)	—	—
PK-4FLSA2/3/4	VL---3.8, Y---4.6, T---4.6	0	0.15(0.33)	0.30(0.66)	0.45(0.99)	0.6(1.32)

4. OUTLET AIR SPEED AND COVERAGE RANGE

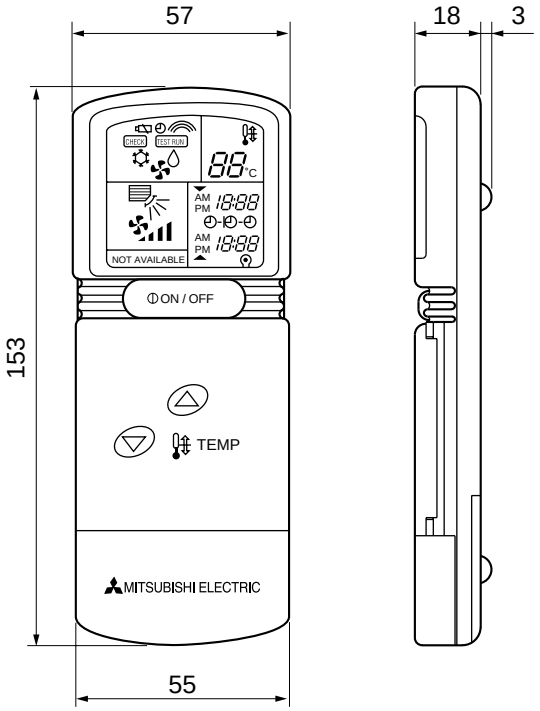
Frequency	Configuration		Wall mounted				
	Model		**PK-1.6FLA**	**PK-2FLA**	**PK-2.5FLA**	**PK-3FLA**	**PK-4FLSA**
50Hz	Airflow	m³/min	13	14	20	20	28
	Air speed	m/sec.	4.0	4.3	4.9	4.9	5.4
	Coverage range※	m(ft)	9.1(30)	9.8(32)	12.4(41)	12.4(41)	15.3(50)
60Hz	Airflow	m³/min	—	14	20	20	28
	Air speed	m/sec.	—	4.3	4.9	4.9	5.4
	Coverage range※	m(ft)	—	9.8(32)	12.4(41)	12.4(41)	15.3(50)

※ The air coverage range is the value up to the position where the air speed is 0.25m/sec. when air is blown out horizontally from the unit at the Hi notch position/
The coverage range should be used only as a general guideline since it varies according to the size of the room and furniture inside the room.

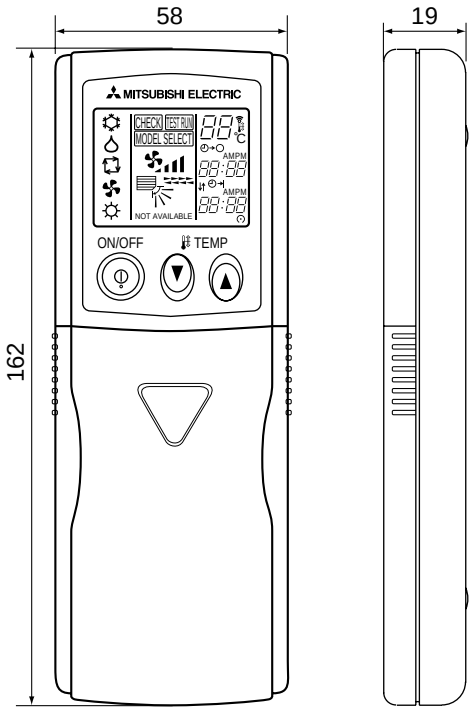
6 OUTLINES AND DIMENSIONS

1. REMOTE CONTROLLER

Unit : mm



PK-1.6FLA3
PK-2FLA3
PK-2.5FLA2, PK-2.5FLA3
PK-3FLA2, PK-3FLA3, PK-3FLA4
PK-4FLSA2, PK-4FLSA3



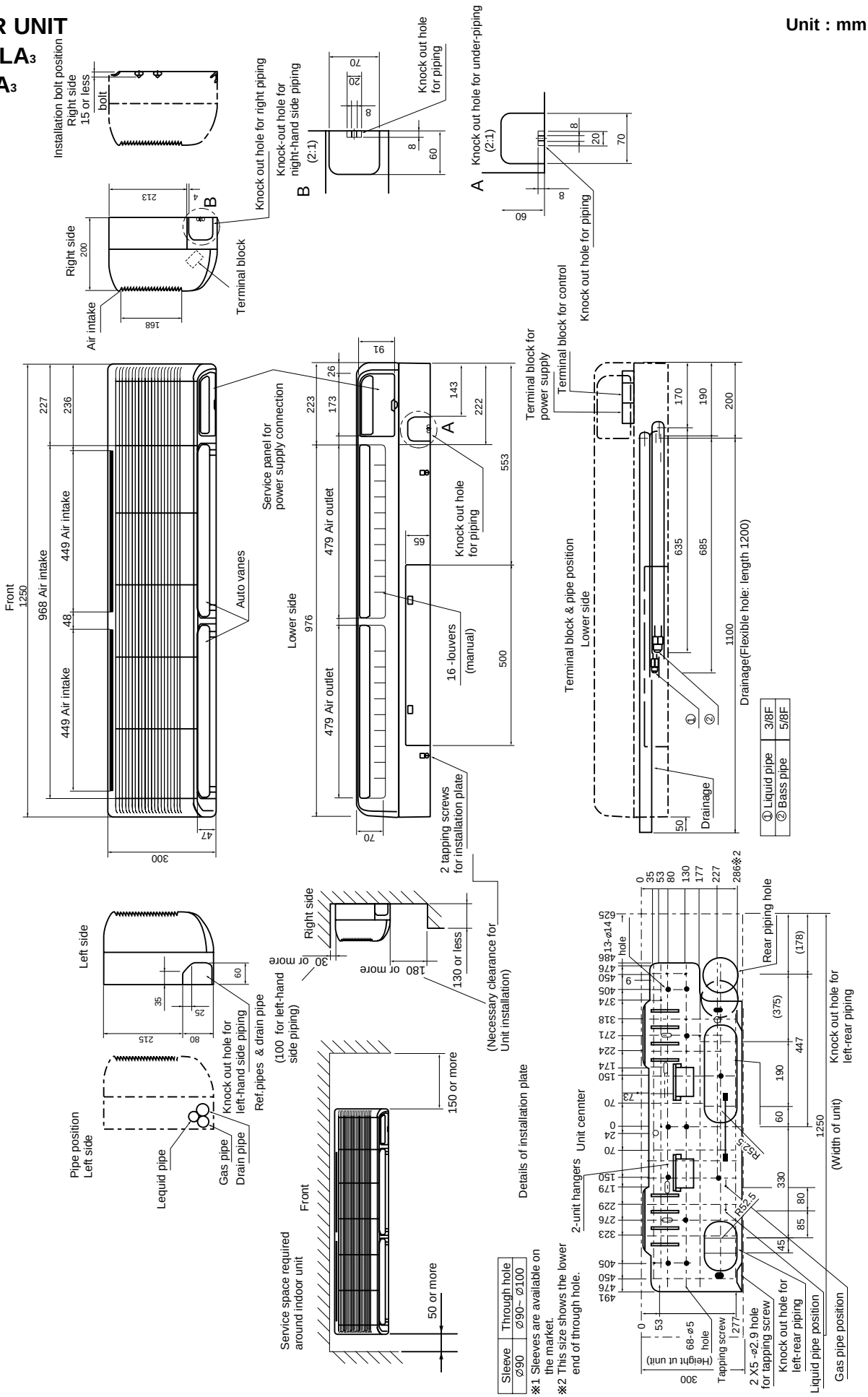
PK-2.5FLA4
PK-3FLA5
PK-4FLSA4

2. INDOOR UNIT

PK-1.6FLA3

PK-2FLA3

Unit : mm



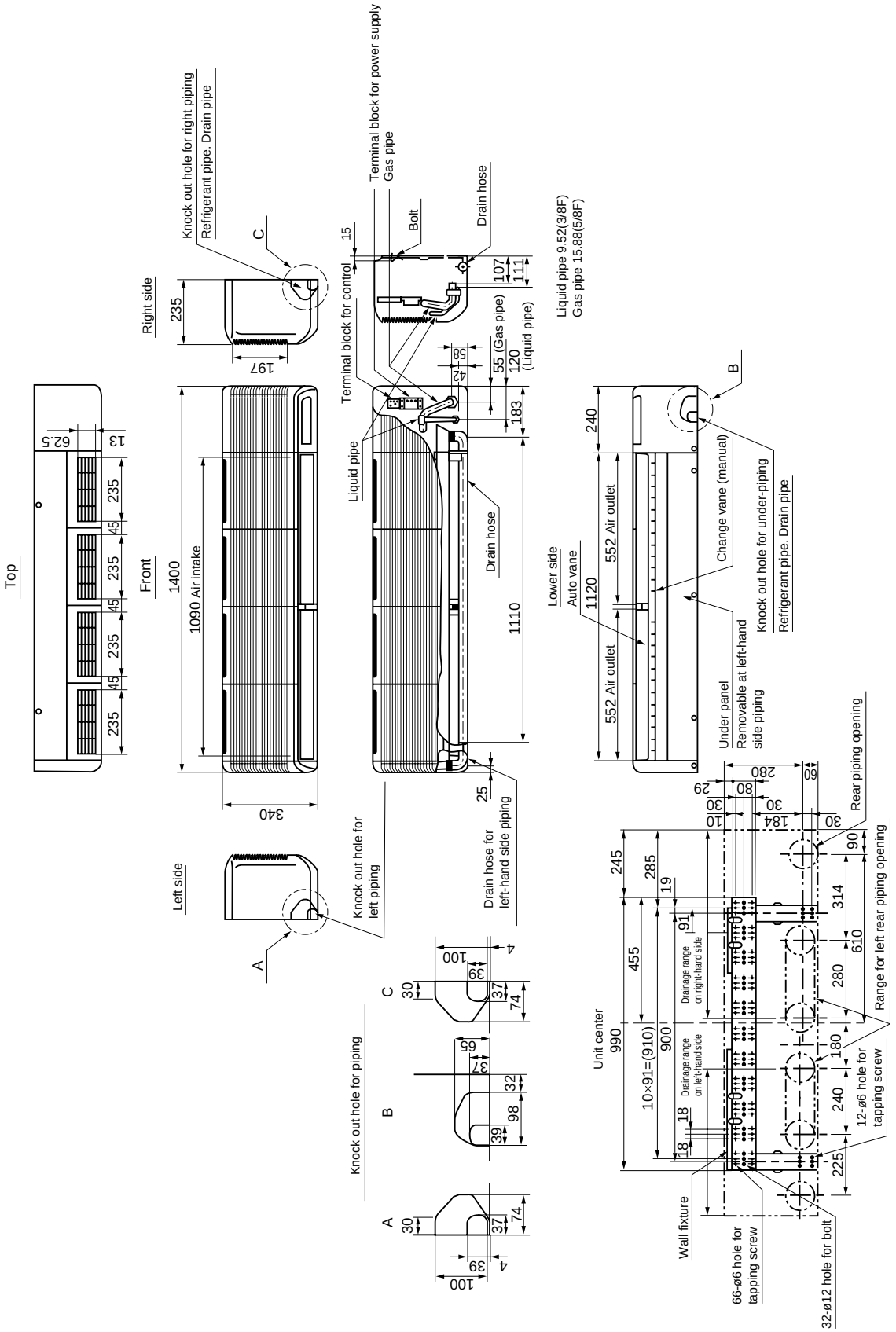
Sleeve	Through hole
ø90	ø90~ ø100

※1 Sleeves are available on the market.

※2 This size shows the lower end of through hole.

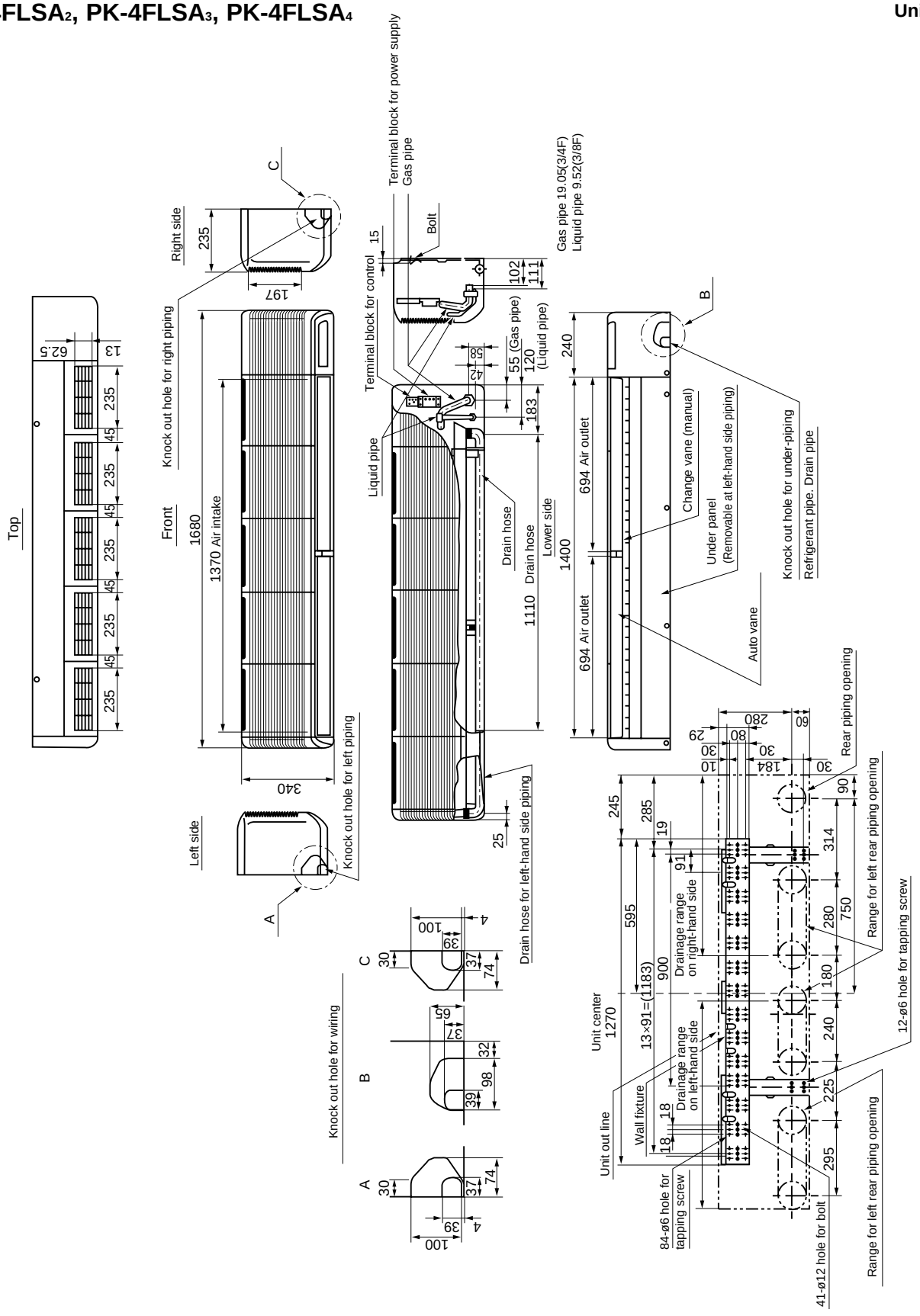
PK-2.5FLA$_2$, PK-2.5FLA$_3$, PK-2.5FLA$_4$
PK-3FLA$_2$, PK-3FLA$_3$, PK-3FLA$_4$, PK-3FLA$_5$

Unit : mm



PK-4FLSA$_2$, PK-4FLSA$_3$, PK-4FLSA$_4$

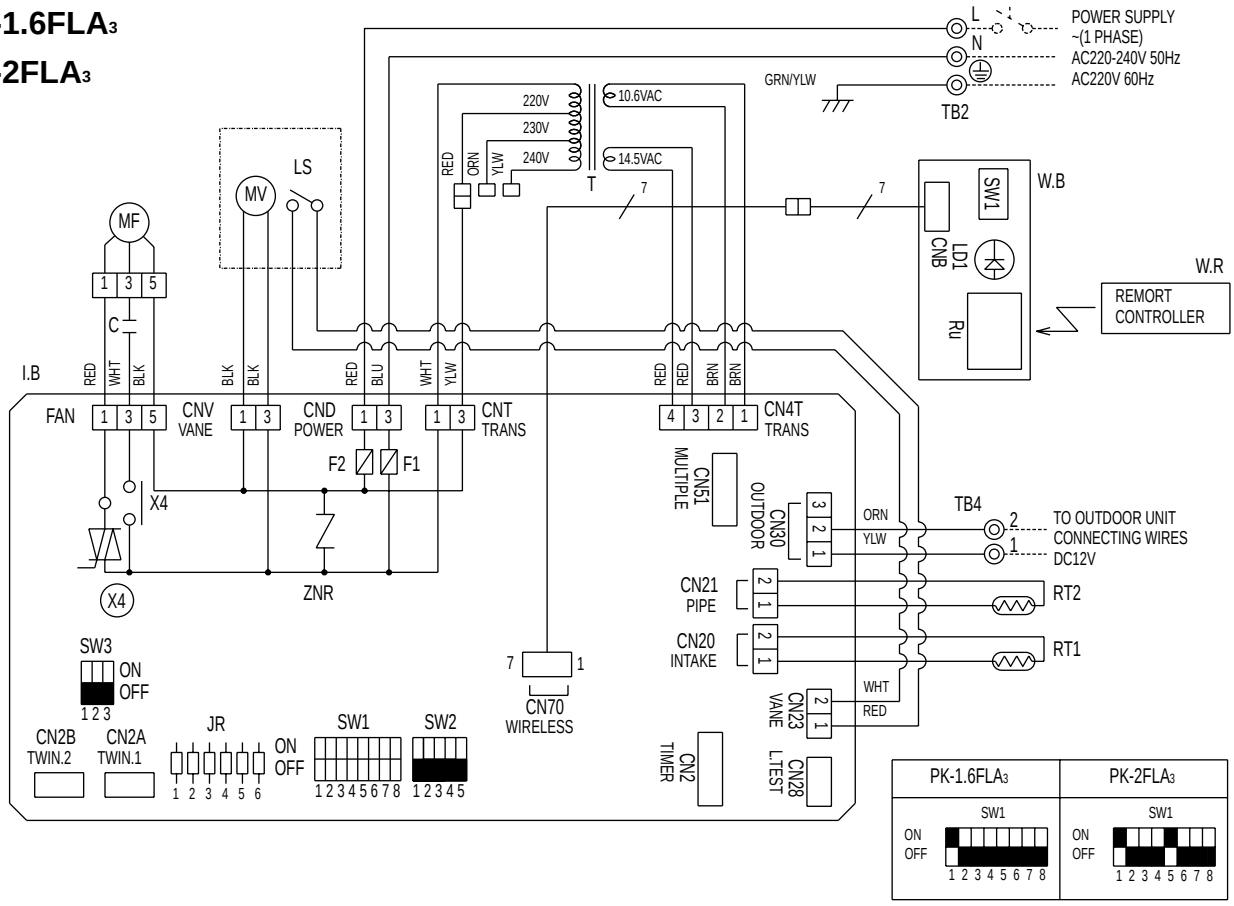
Unit : mm



7 WIRING DIAGRAM

PK-1.6FLA$_3$

PK-2FLA$_3$

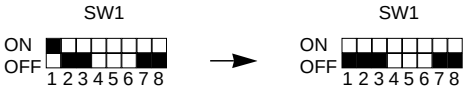


SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
C	FAN MOTOR CAPACITOR	LD1<W.B>	RUN INDICATOR LED	SW3<I.B>	EMERGENCY OPERATION SWITCH
CN2<I.B>	TIMER ADAPTOR CONNECTOR	MF	FAN MOTOR	SW1<W.B>	ON/OFF SWITCH
CN2A<I.B>	TRANSMISSION WIRES No.1 CONNECTOR	MV	VANE MOTOR	T	TRANSFORMER
CN2B<I.B>	TRANSMISSION WIRES No.2 CONNECTOR	RT1	ROOM TEMPERATURE THERMISTOR	TB2	POWER SUPPLY TERMINAL BLOCK
CN23<I.B>	VANE POSITION CONNECTOR		(0%/15kΩ,25°C/5.4kΩ DETECT)	TB4	INDOOR/OUTDOOR CONNECTING WIRE TERMINAL BLOCK
CN28<I.B>	TIME SHORTENING CONNECTOR	RT2	PIPE TEMPERATURE THERMISTOR		
CN51<I.B>	MULTIPLE CONNECTOR		(0%/15kΩ. 25°C/5.4kΩ DETECT	X4<I.B>	FAN MOTOR RELAY
F1,2<I.B>	FUSE(6.3A 250V)	Ru<W.B>	RECEIVING UNIT	ZNR	VARISTOR
I.B	INDOOR CONTROLLER BOARD	SW1<I.B>	FUNCTION SWITCH	W.B	WIRELESS REMOTE CONTROLLER BOARD
JR	FUNCTION SELECTOR JUMPER RESISTORS	SW2<I.B>	UNIT SELECTOR SWITCH	W.R	WIRELESS REMOTE CONTROLLER

NOTES:

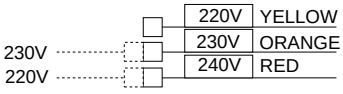
1. Since the indoor fan motor (MF) is connected with 220V power, using 230, 240V power will require a setting change of the dip switch (SW1<I.B>) on the indoor controller board as shown is fig:*1.

fig *1 Indoor fan motor (MF) for 230,240V.



2. Since the outdoor side electric wiring may change be sure to check the outdoor unit electric wiring for servicing.
3. Since the indoor transformer (T) is connected with 220V power, if 230,240V power is used. Change the wiring connection showing fig * : 2.

fig *2 When power supply is



4. Symbols used in wiring diagram above are, □□: Connector, ◎: Terminal block.
5. Emergency operation

If remote controller of microcomputer fails but there is no other trouble, emergency operation is possible by setting dip switch (SW3<I.B>) on the indoor controller board.

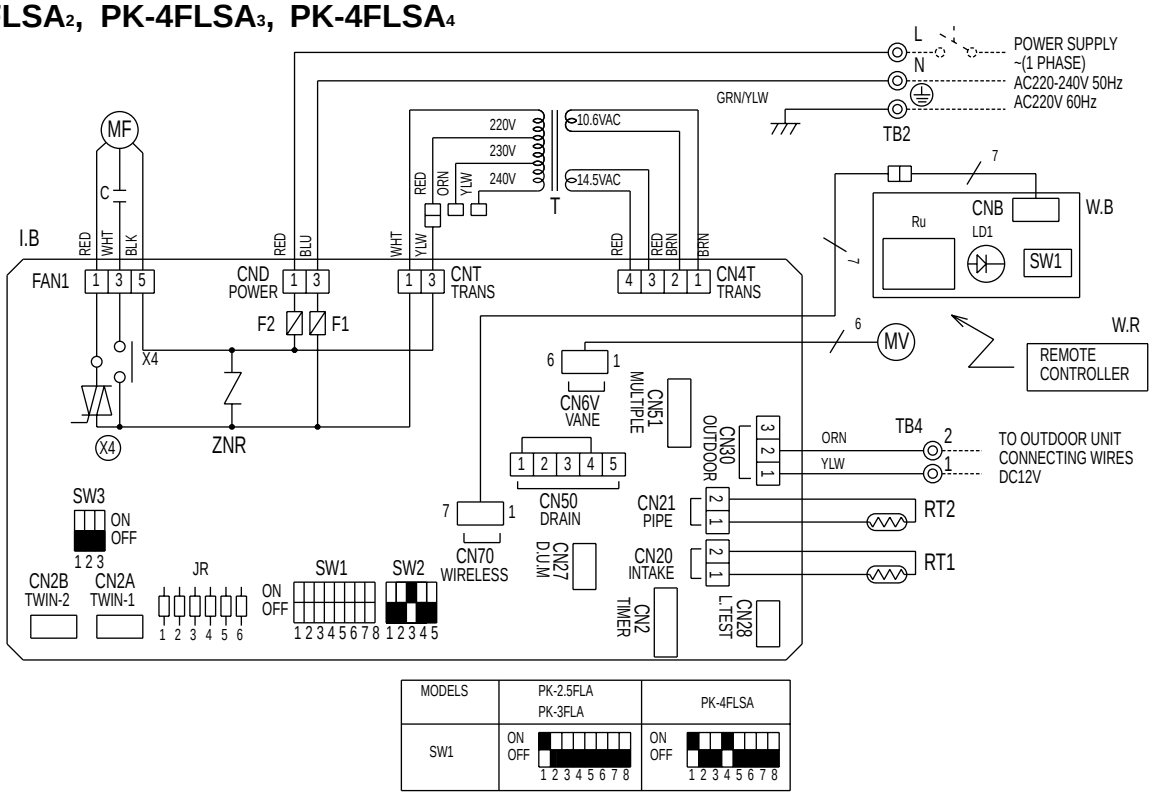
[Check items]

(1) Compressor and fan.
(2) Check the trouble position using self diagnostic function. If the result of self diagnosis indicates protective device such as freeze protection is functioning emergency operation is not possible unless the cause is removed.
Emergency operation will be continuous operation mode due to power ON/OFF (ON/OFF with remote controller is not possible).

[Emergency operation procedure]

(1) Set the dip switch (SW3<I.B>) on the indoor controller board to 1 • 2 on and 3 off for cooling.
(2) Turn on outdoor unit side circuit breaker, then indoor unit side circuit breaker in this order.
(3) During emergency operation indoor fan runs at high speed but automatic vane remains stop.
If vane is closed open the vane by hands/
(4) Thermostat will not function.
(5) Emergency cooling should be limited to 10 hours maximum.
(The indoor unit heat exchanger may freeze).

PK-2.5FLA$_2$, PK-2.5FLA$_3$, PK-2.5FLA$_4$
PK-3FLA$_2$, PK-3FLA$_3$, PK-3FLA$_4$, PK-3FLA$_5$
PK-4FLSA$_2$, PK-4FLSA$_3$, PK-4FLSA$_4$



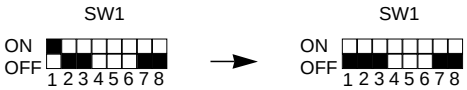
MODELS	PK-2.5FLA PK-3FLA	PK-4FLSA
SW1	ON OFF 1 2 3 4 5 6 7 8	ON OFF 1 2 3 4 5 6 7 8

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
C	FAN MOTOR CAPACITOR	MF	FAN MOTOR	TB2	POWER SUPPLY TERMINAL BLOCK
CN2<I.B>	TIMER ADAPTOR CONNECTOR	MV	VANE MOTOR	TB4	INDOOR/OUTDOOR CONNECTING WIRE TERMINAL BLOCK
CN2A<I.B>	TRANSMISSION WIRES No.1 CONNECTOR	RT1	ROOM TEMPERATURE THERMISTOR (0%/15kΩ,25°C/5.4kΩ DETECT)		
CN2B<I.B>	TRANSMISSION WIRES No.2 CONNECTOR			X4<I.B>	FAN MOTOR RELAY
CN23<I.B>	DRAIN LEFT-UP MECHANISM	RT2	PIPE TEMPERATURE THERMISTOR (0%/15kΩ. 25%/5.4kΩ DETECT	ZNR	VARISTOR
CN27<I.B>	VANE POSITION CONNECTOR			SW1<W.B>	ON/OFF SWITCH
CN28<I.B>	TIME SHORTENING CONNECTOR	Ru<W.B>	RECEIVING UNIT	LD1<W.B>	RUN INDICATOR LED
CN51<I.B>	MULTIPLE CONNECTOR	SW1<I.B>	FUNCTION SWITCH	W.B	WIRELESS REMOTE CONTROLLER BOARD
F1,2<I.B>	FUSE(6.3A 250V)	SW2<I.B>	UNIT SELECTOR SWITCH	W.R	WIRELESS REMOTE CONTROLLER
I.B	INDOOR CONTROLLER BOARD	SW3<I.B>	EMERGENCY OPERATION SWITCH		
JR	FUNCTION SELECTOR JUMPER RESISTORS	T	TRANSFORMER		

NOTES:

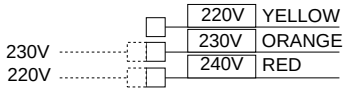
1. Since the indoor fan motor (MF) is connected with 220V power, using 230, 240V power will require a setting change of the dip switch (SW1<I.B>) on the indoor controller board as shown is fig:※1.

fig ※1 Indoor fan motor (MF) for 230,240V.



2. Since the outdoor side electric wiring may change be sure to check the outdoor unit electric wiring for servicing.
3. Since the indoor transformer (T) is connected with 220V power, if 230,240V power is used. Change the wiring connection showing fig * : 2.

fig ※2 When power supply is



4. Symbols used in wiring diagram above are, □□: Connector, ◎: Terminal block.
5. Emergency operation
   If remote controller of microcomputer fails but there is no other trouble, emergency operation is possible by setting dip switch (SW3<I.B>) on the indoor controller board.

[Check items]

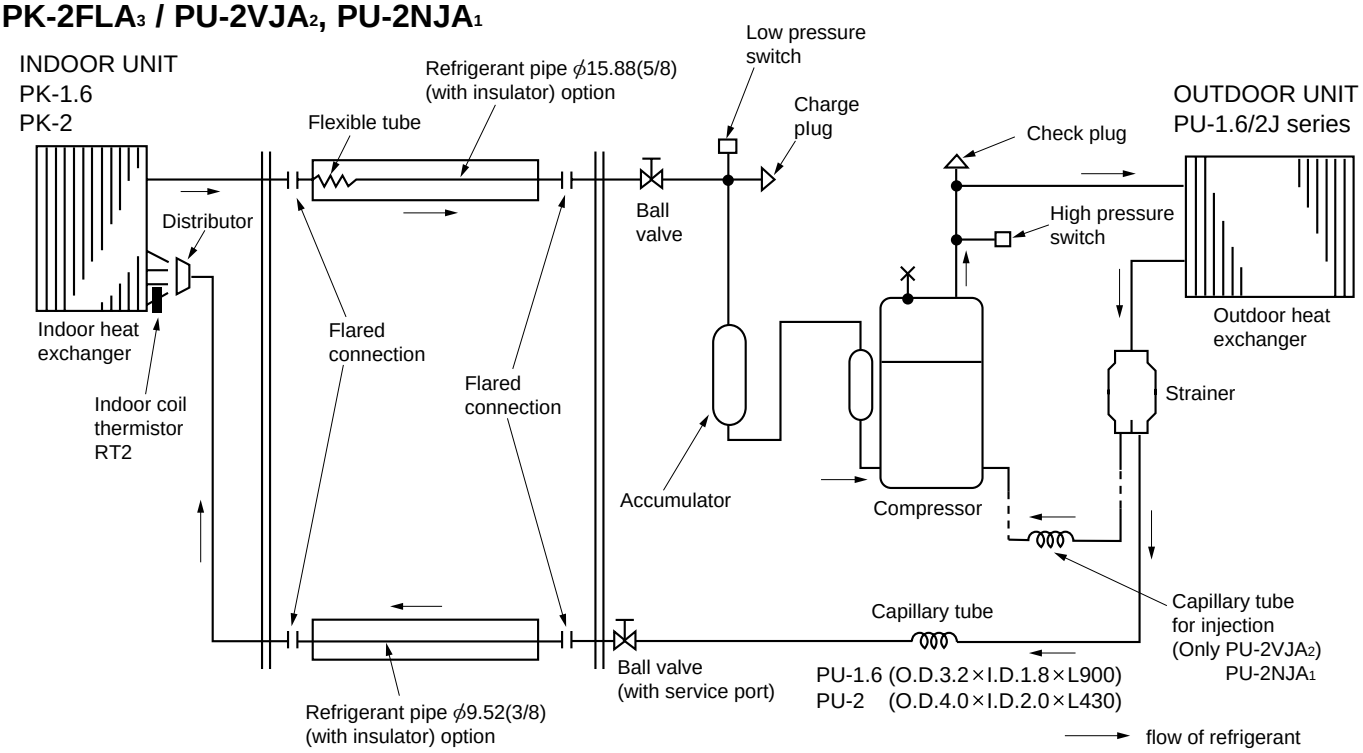
(1) Compressor and fan.
(2) Check the trouble position using self diagnostic function. If the result of self diagnosis indicates protective device such as freeze protection is functioning emergency operation is not possible unless the cause is removed.
Emergency operation will be continuous operation mode due to power ON/OFF (ON/OFF with remote controller is not possible).

[Emergency operation procedure]

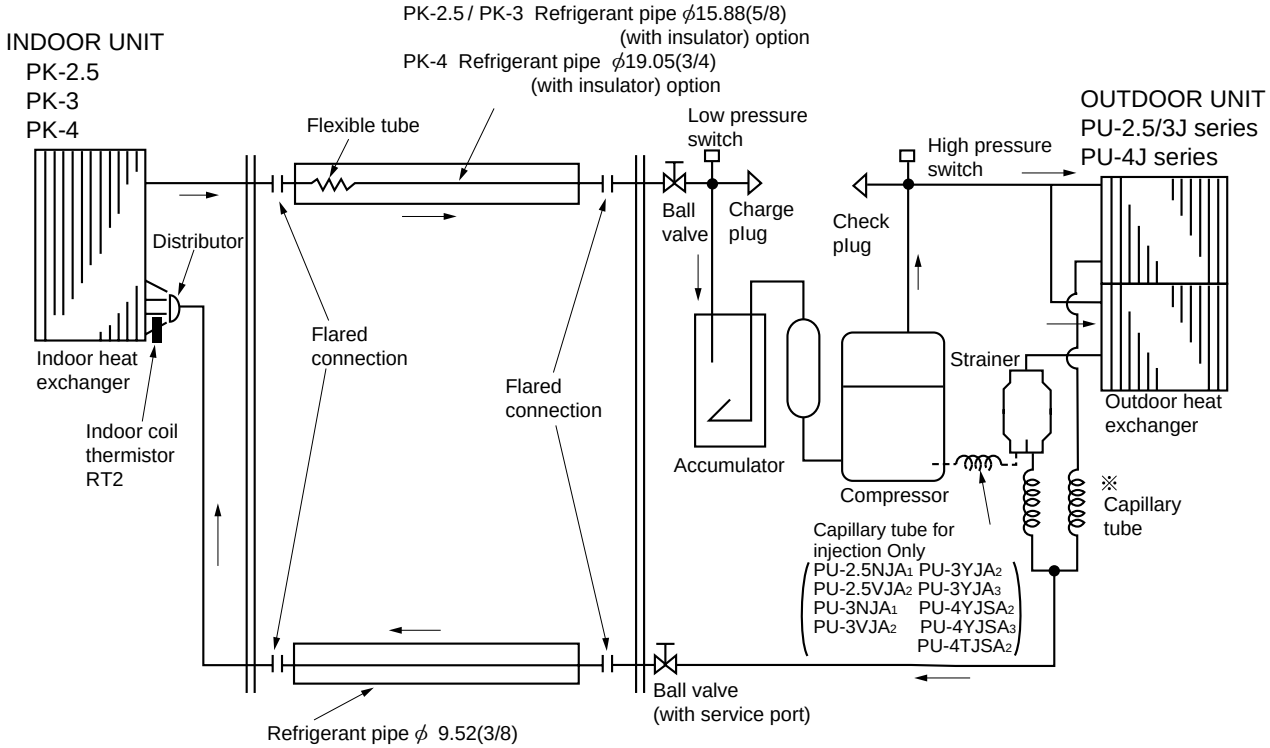
(1) Set the dip switch (SW3<I.B>) on the indoor controller board to 1 • 2 on and 3 off for cooling.
(2) Turn on outdoor unit side circuit breaker, then indoor unit side circuit breaker in this order.
(3) During emergency operation indoor fan runs at high speed but automatic vane remains stop.
(4) Thermostat will not function.
(5) Emergency cooling should be limited to 10 hours maximum.
(The indoor unit heat exchanger may freeze).

8 REFRIGERANT SYSTEM DIAGRAM

PK-1.6FLA$_3$ / PU-1.6VLJA$_2$
PK-2FLA$_3$ / PU-2VJA$_2$, PU-2NJA$_1$

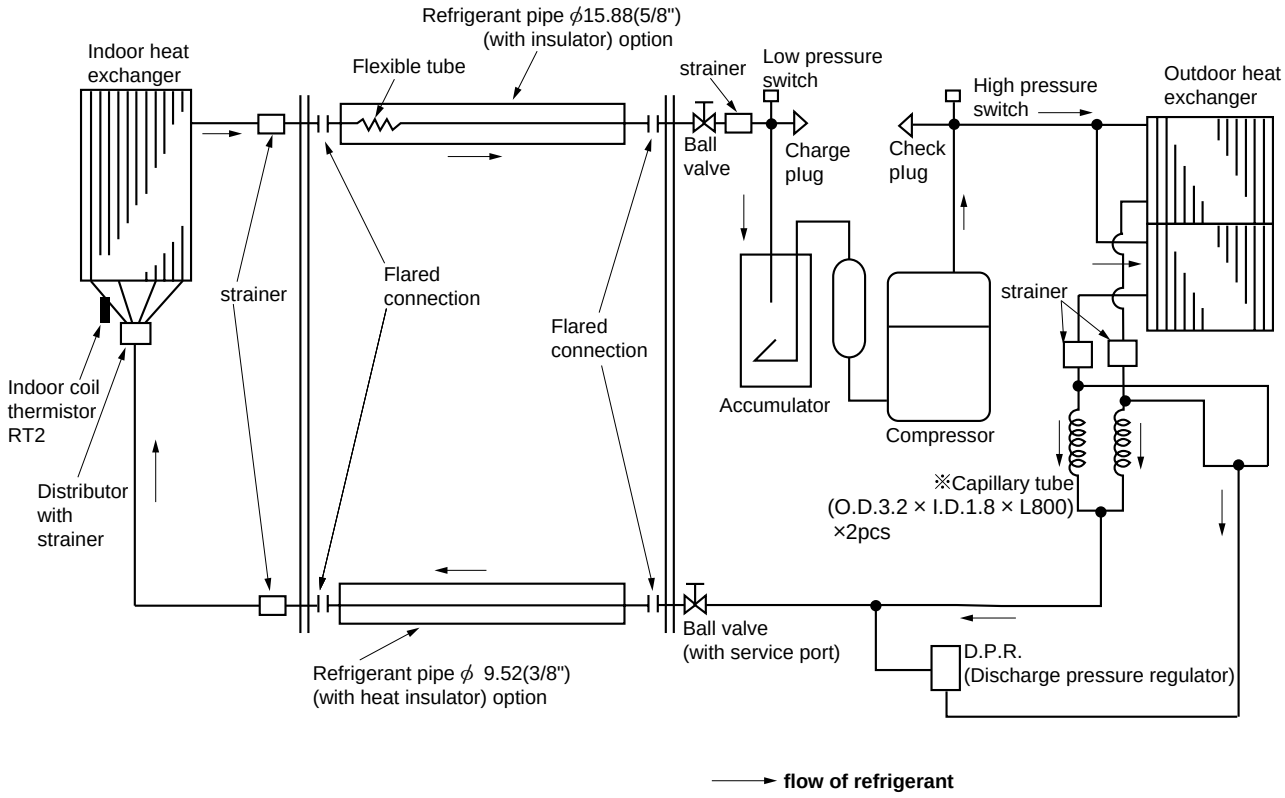


PK-2.5FLA$_2$, PK-2.5FLA$_3$, PK-2.5FLA$_4$, / PU-2.5VJA$_2$, PU-2.5NJA$_1$
PK-3FLA$_2$ / PU-3VJA$_2$, PU-3YJA$_3$, PU-3NJA$_1$
PK-3FLA$_3$, PK-3FLA$_4$, PK-3FLA$_5$ / PU-3NJA$_1$
PK-4FLSA$_2$, PK-4FLSA$_3$, PK-4FLSA$_4$, / PU-4VLJSA$_2$, PU-4YJSA$_3$, PU-4TJSA$_2$

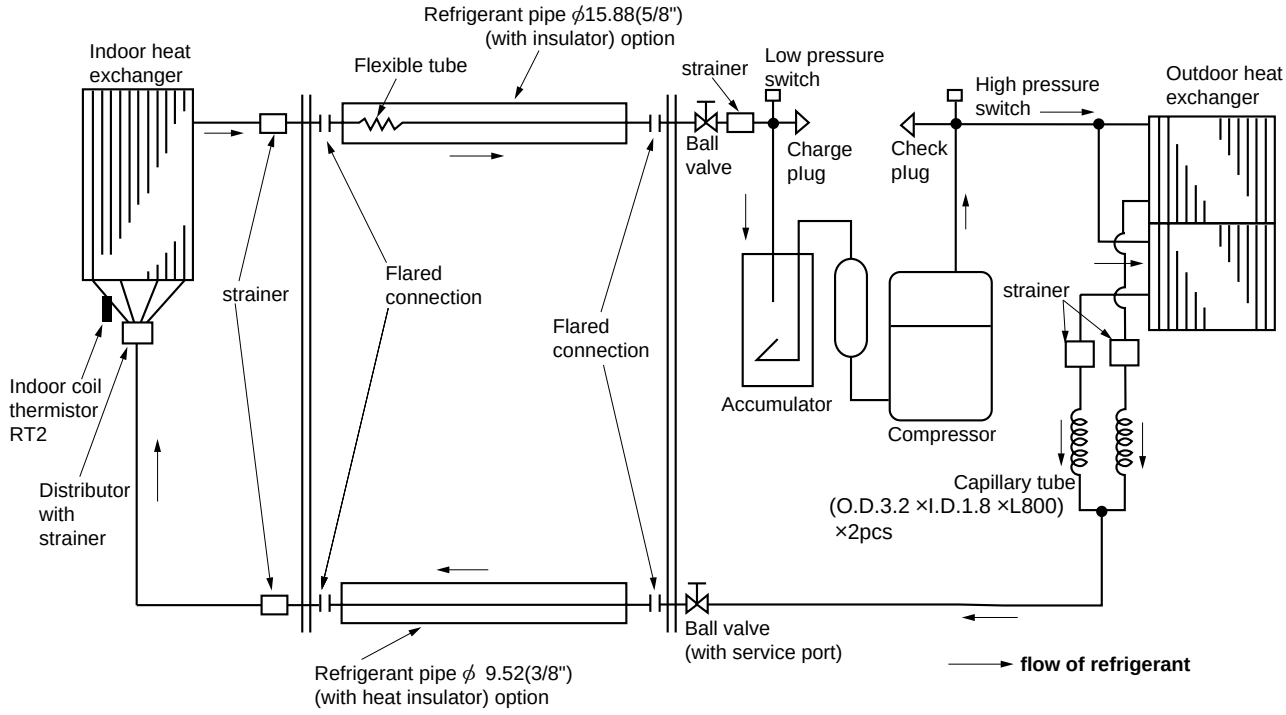


※ Capillary tube size
PU-2.5 (O.D.3.2×I.D.1.6×L760)×2pcs
PU-3 (O.D.3.2×I.D.1.8×L800)×2pcs
PU-4 (O.D.3.2×I.D.2.0×L840)×2pcs

PK-3FLA$_3$, PK-3FLA$_4$, PK-3FLA$_5$ / PU-3VJC , PU-3YJC

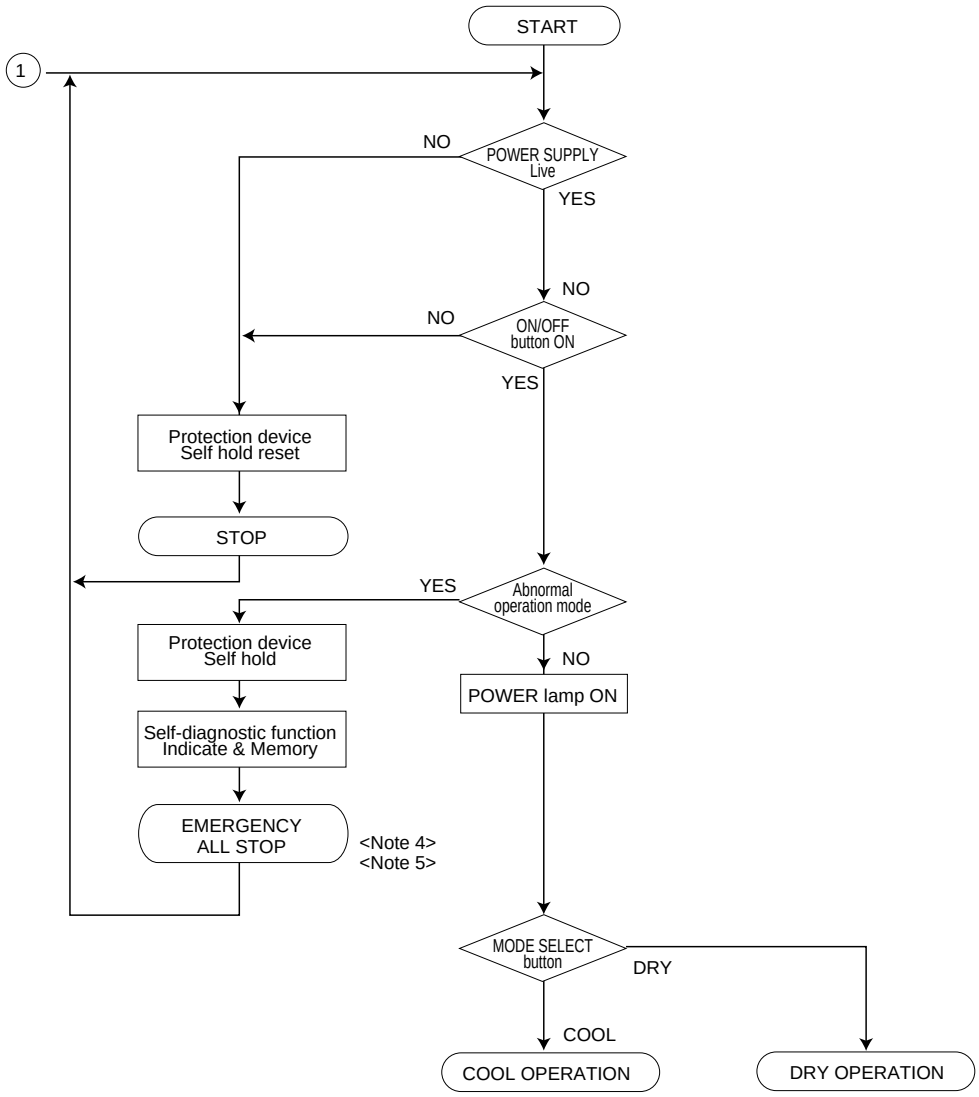


PK-3FLA$_3$, PK-3FLA$_4$, PK-3FLA$_5$ / PU-3VJB , PU-3YJB



9 OPERATION FLOW-CHART

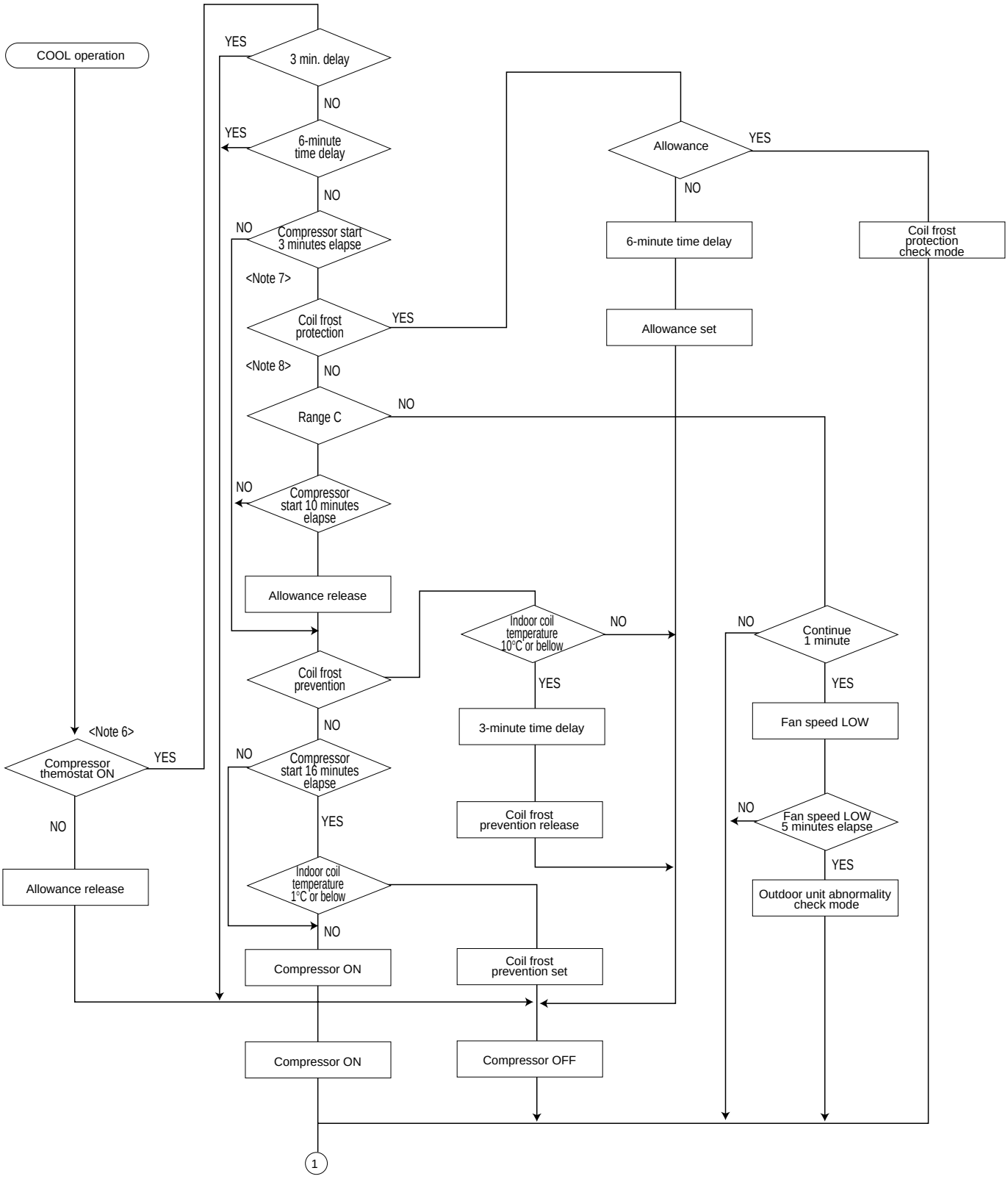
1. Main operation



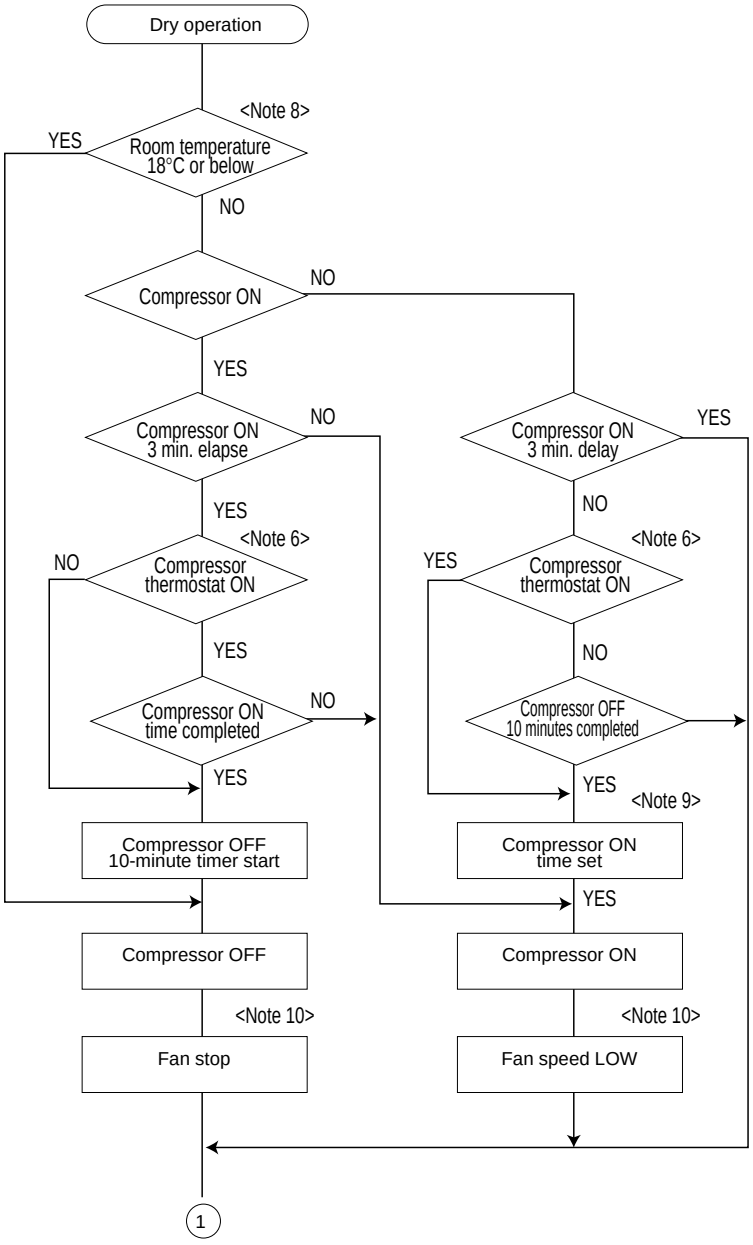
Note1. The unit starts operation by pressing the ON/OFF switch when unit is OFF.
During operation, the unit stops operation by pressing the ON/OFF switch.
In addition, operation can be turned ON/OFF with the centralized remote controller or the remote switch.
Note2. The factors which cause “abnormal operation mode” are as follows.
- Outdoor unit abnormal operation.
- Fault of room temperature thermistor(RT1).
- Fault of indoor coil thermistor(RT2).
- Indoor coil frost protection mode.
- Fault of drain sensor(DS).
- Drain water overflow prevention mode.

Refer to page 30 for abnormal operation, mode details.
Note3. The indoor fan runs on the low speed for 1 minute to eliminate remaining heat.
Note4. The compressor will not start for 3 minutes after the stop.
Note5. The thermostat is continuously ON during the test run.
Note6. Refer to page 31 for coil frost protection.
Note7. Range A : Indoor coil temperature is more than 5 degrees above room temperature.
Range B : Indoor coil temperature is within 5 degrees either way of room temperature.
Range C : Indoor coil temperature is more than 5 degrees below room temperature.

2. COOL operation



3. DRY operation



Note8. When room temperature is 18°C or below, the compressor can not turn ON. When the room temperature rises to 18°C or above, the compressor will start operation after a 3-minute time delay.
Note9. Refer to page 30 for the compressor operation time.
Note10. In DRY operation, the indoor fan runs on the low speed during the compressor ON and stops during the compressor OFF.

10 MICROPROCESSOR CONTROL

1. OUTLINE OF MICROPROCESSOR CONTROL

INPUT to remote controller

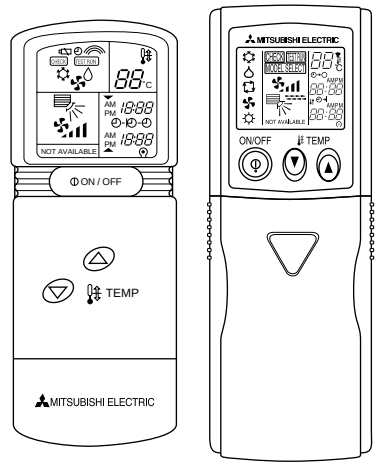
- OFF-ON switching.
- COOL • DRY • FAN selector switching.
- HIGH-LOW fan speed switching.
- TIMER mode selector-switching
- Timer setting.
- Self diagnostic troubleshooting.
- TEST RUN switching.
- CHECK mode switching.
- AUTO Vane setting.

REMOTE CONTROLLER

●Processes and transmits orders.

OUTPUT to remote controller

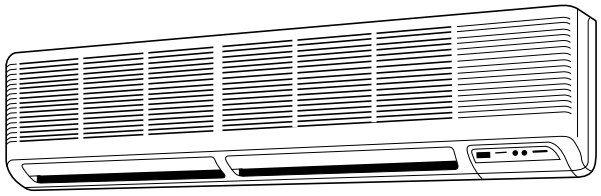
● Indication LCD lights.



PK-1.6FLA3
PK-2FLA3
PK-2.5FLA2/3
PK-3FLA2/3/4
PK-4FLSA2/3

PK-2.5FLA4
PK-3FLA5
PK-4FLSA4

Indoor unit



INPUT from indoor unit

- Room temperature thermistor.
- Indoor coil thermistor.

INDOOR CONTROLLER BOARD

- Receives orders from remote controller and temperature data from indoor unit.
- Processes orders and data.
- Controls indoor and outdoor operation.
- Self diagnostic function

※ System control operation.<Optional>
※ Emergency operation

OUTPUT to indoor unit

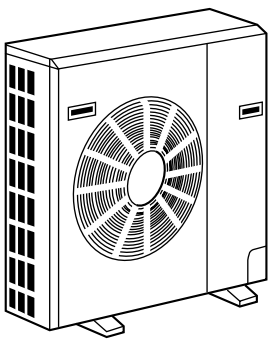
- Fan: ON-OFF.
- Fan speed: HIGH-LOW.
- AUTO vane's angle setting.
- Emergency stop.

Non-polar, two (2) - core cable

Independent Control of Outdoor Unit

12VDC

Outdoor unit



INPUT from outdoor unit

- Compressor protection device working.

OUTPUT UNIT

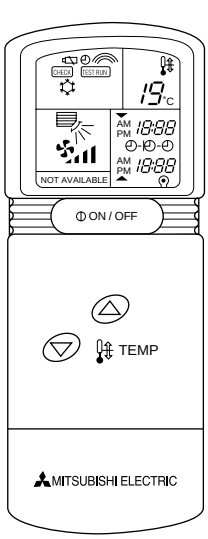
- Receives orders from indoor controller.
- Emergency stop.

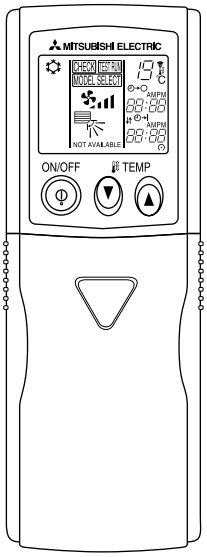
OUTPUT from outdoor unit

- Compressor motor and outdoor fan motor : ON-OFF.

2. INDOOR UNIT CONTROL

2-1COOL operation





PK-1.6FLA3
PK-2FLA3
PK-2.5FLA2/3
PK-3FLA2/3/4
PK-4FLSA2/3

PK-2.5FLA4
PK-3FLA5
PK-4FLSA4

<How to operate>

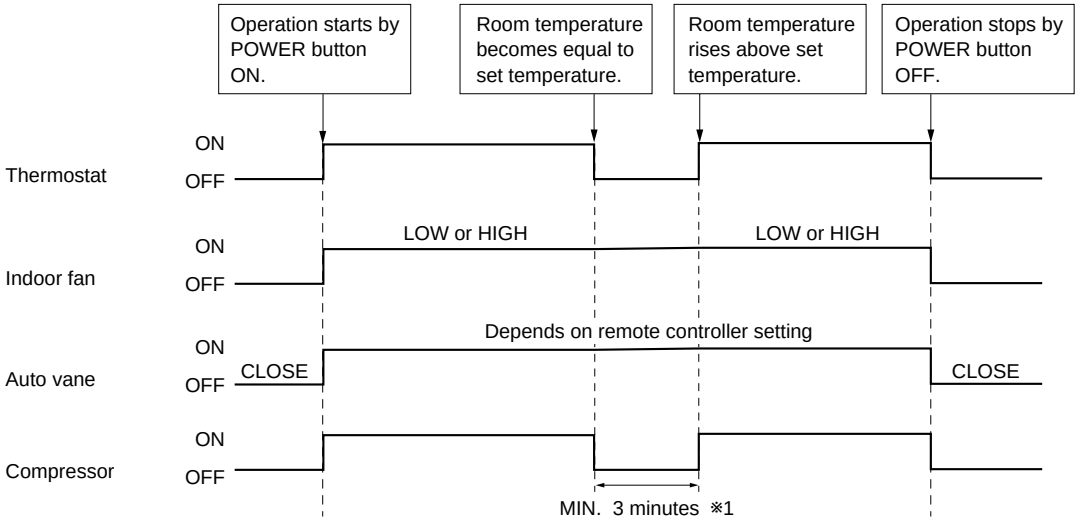
① Press ⏻ ON/OFF button.

② Press MODE button to set operation mode to COOL ☼.

③ Set desired temperature with ▽/▲ or ▽/▼ button.
button.

NOTE: 1. Set temperature changes by 1 °C in the range 19-30 °C each TEMP ▽/▲ or ▽/▼ button is pressed.
2. Set temperature is displayed on the LCD.

<COOL operation time chart>



※1 Even if the room temperature rises above the set temperature during this period, the compressor will not start until this period has ended.

(1)Compressor control

① 3-minute time delay
To prevent overload, the compressor will not start within 3 minutes after stop.

② The compressor runs when the room temperature is higher than the set temperature.
The compressor stops when the room temperature is equal to or lower than the set temperature.

③ The compressor stops in check mode or during protective functions.

④ Coil frost prevention
To prevent indoor coil frost, the compressor will stop when the indoor coil thermistor (RT2) reads 1°C or below after the compressor has been continuously operated for 16 minutes or more. The coil frost prevention is released under any of the following conditions.

- The indoor coil thermistor rises to 10°C or above.
- The room temperature becomes equal to or lower than the set temperature.
- COOL mode is stopped or changed to another mode.

NOTE : By cutting the jumper wire JR02 on the indoor controller board, the temperature to start coil frost prevention changes from 1°C to - 3°C

⑤ Coil frost protection

When the indoor coil temperature becomes - 15°C or below, coil frost protection will proceed as follows.

<Start condition>

After the compressor has been continuously operated for 3 minutes or more, and the indoor coil temperature has been - 15°C or below for 3 minutes, the coil frost protection will start.

<Coil frost protection>

Compressor stops for 6 minutes, and then restarts.

If the start condition is satisfied again during the first 10 minutes of compressor operation, both the indoor and outdoor units stop, and the remote controller displays this occurrence.

<Termination conditions>

Coil frost protection released when the start condition is not satisfied again during the allowance, or when the COOL mode stops changes another mode.

(2)Indoor fan control

Indoor fan speed depends on the remote controller setting.

However, if an outdoor unit abnormality is detected, the indoor fan speed will be LOW, regardless of the remote controller setting.

(3)Auto vane control

Auto vane position depends on the remote controller setting.

(4)Detecting abnormalities in the outdoor unit

After the compressor has been continuously operated for 3 minutes, if the difference between the indoor coil temperature and the room temperature is out of RANGE C for 1 minute, the indoor fan speed will turn to LOW. Five minutes later, if the difference is still out of RANGE C, the outdoor unit is functioning abnormally. Thus, the compressor will stop and the remote controller will display this occurrence.

RANGE A : Indoor coil temperature is more than 5 degrees above room temperature.

RANGE B : Indoor coil temperature is within 5 degrees either way of room temperature.

RANGE C : Indoor coil temperature is more than 5 degrees below room temperature.

(5)AUTO VANE CONTROL

① Frequency judgement

When the unit operates for the first time after the circuit breaker turned to ON, the frequency, 50Hz or 60Hz, is judged by the horizontality sensing switch. If The frequency cannot be judged immediately for some reason, the sensing operation continues for 3 minutes with the vane motor at ON.

If the frequency cannot be judged yet after 3-minute sensing, the vane motor turns to OFF. But the AIR DISCHARGE DIRECTION display continues to be indicated.

② During cooling operation

When the cooling operation starts, the vane is automatically set to the horizontal However, the desired direction among four below-listed can be selected with the vane button on the remote controller.

a) 10°
b) 30° downward
c) 60° downward (PK-2.5, 3, 4FL(S)A) / 50° downward (PK-1.6, 2FLA)
d) 70° downward (PK-2.5, 3, 4FL(S)A) / 60° downward (PK-1.6, 2FLA)
e) Automatic swing (only PK-2.5, 3, 4FL(S)A)

NOTE : 30° is available only when the fan speed is HIGH.

<AUTO RETURN>

When discharge 50°, 60° or 70° continues for 1 hour with the fan speed at LOW, the discharge direction turns to the horizontal discharge automatically.

NOTE1 : After that, 50°, 60° or 70° is available by setting with the remote controller, and it continues for 1 hour.

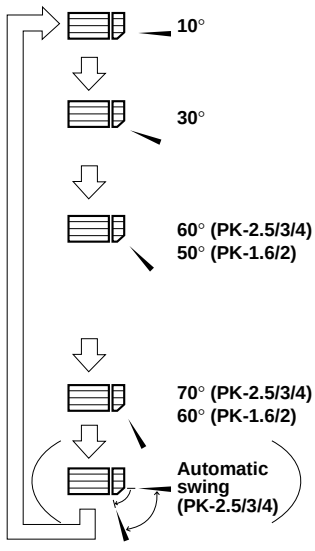
NOTE2 : If the discharge direction changes from 50°, 60° or 70° , the direction returns to the horizontal discharge when 1 hour has passed since the discharge 60° started.

NOTE3 : If the discharge direction changes from 50° or 60° (or 70°) to the horizontal discharge, the 1-hour timer to return the horizontal discharge is cancelled.

③ During the operation OFF, the auto vane is in the airflow shut-off position.

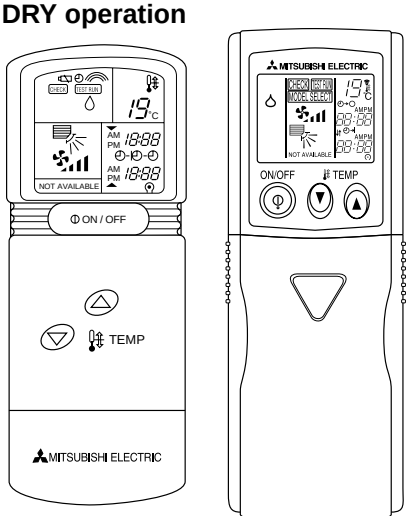
④ When the vane motor is out of order or the connector is badly connected, the remote controller display of the remote controller does not change.

<Remote controller display>



Changes by pressing the Vane button:

2-2 DRY operation



PK-1.6FLA3
PK-2FLA3
PK-2.5FLA2/3
PK-3FLA2/3/4
PK-4FLSA2/3

PK-2.5FLA4
PK-3FLA5
PK-4FLSA4

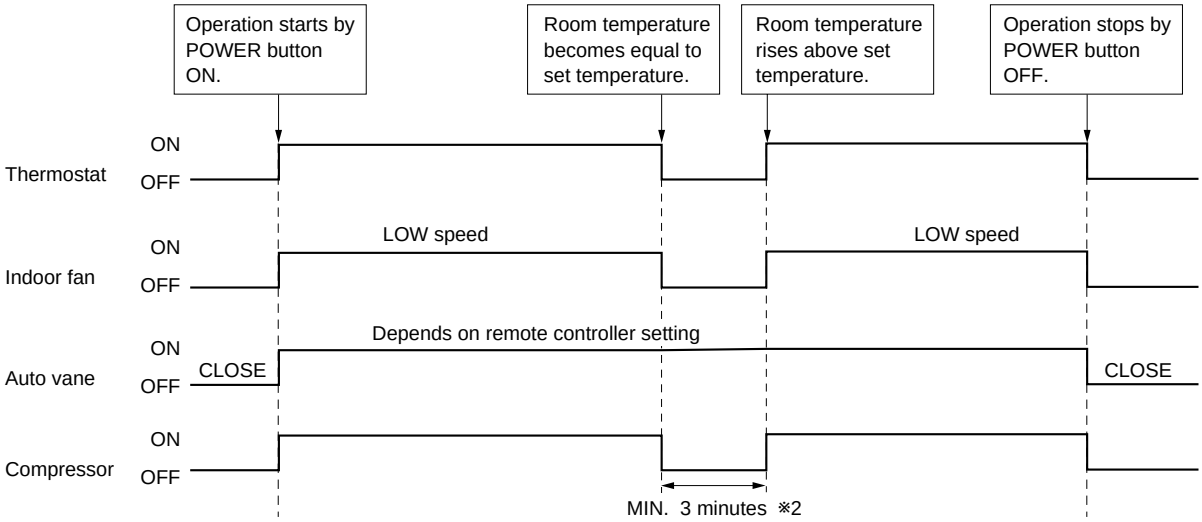
<How to operate>

① Press Φ ON/OFF button.

② Press MODE button to set operation mode to DRY ♢.

③ Set desired temperature with ▲/▲ or ▼/▼ button.

NOTE: 1. Set temperature changes by 1 °C in the range 19-30 °C each TEMP ▲/▲ or ▼/▼ button is pressed.
2. Set temperature is displayed on the LCD.



※2 Even if the room temperature rises above the set temperature during this period, the compressor will not start until this period has ended.

(1)Compressor control

① 3-minute time delay
To prevent overload, the compressor will not start within 3 minutes after stop.

② The compressor runs when the room temperature is higher than the set temperature.
The compressor stops when the room temperature is equal to or lower than the set temperature.

③ The compressor stops in check mode or during protective functions.

④ The compressor will not start when the room temperature is below 18 °C. The compressor starts intermittent operation when the power is turned ON with room temperature above 18 °C. The compressor ON/OFF time depends on the thermostat ON/OFF and the room temperature as follows.
After 3-minute compressor operation,
● If the room temperature thermistor reads above 28 °C with thermostat ON, the compressor will operate will operate for 6 more minutes and then stop for 3 minutes.
● If the room temperature thermistor reads 26 °C ~ 28 °C with thermostat 0N, the compressor will operate for 4 more minutes and then stop for 3 minutes.
● If the room temperature thermistor reads 24 °C ~ 26 °C with thermostat ON, the compressor will operate for 2 more minutes and then stop for 3 minutes.
● If the room temperature thermistor reads below 24 °C with thermostat ON, the compressor will stop for 3 minutes.
●If the thermostat is OFF, regardless of room temperature, the compressor will stop for 10 minutes.

⑤ Coil frost protection
Coil frost protection in DRY operation is the same as in COOL operation.

⑥ Coil frost prevention
Coil frost prevention does not operate in DRY operation.

(2) Indoor fan control

The indoor fan runs on LOW speed during compressor operation. The fan speed cannot be changed with the remote controller.

Also, the indoor fan does not run during compressor OFF.

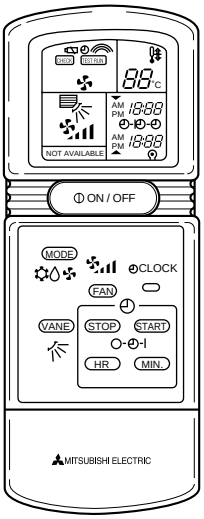
(3)Auto vane control

Same as in COOL operation.

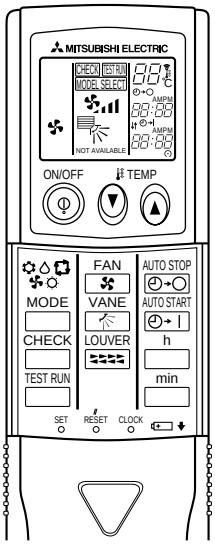
(4)Detecting abnormalities in the outdoor unit

An abnormality in the outdoor unit can not be detected in DRY operation.

2-3 FAN operation



PK-1.6FLA3
PK-2FLA3
PK-2.5FLA2/3
PK-3FLA2/3/4
PK-4FLSA2/3



PK-2.5FLA4
PK-3FLA5
PK-4FLSA4

<How to operate>

① Press POWER ON/OFF button.

② Press MODE button to set operation mode to Fan .

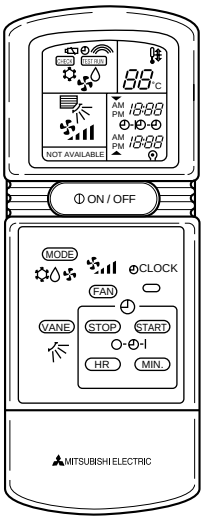
(1) Indoor fan control

The indoor fan speed depends on the remote controller setting.

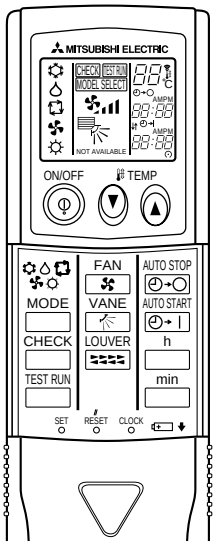
(2) Auto vane control

The auto vane position depends on the remote controller setting.

2-4 TIMER operation



PK-1.6FLA3
PK-2FLA3
PK-2.5FLA2/3
PK-3FLA2/3/4
PK-4FLSA2/3



PK-2.5FLA4
PK-3FLA5
PK-4FLSA4

<How to operate>

① Push POWER ON/OFF button.

② Check if or not the current time is correct.

③ Push the (STOP) / (AUTO STOP) or (START) / (AUTO START) button and select the desired time.

④ Set the timer time using (HR) / (h) and (MIN.) / (min) buttons.

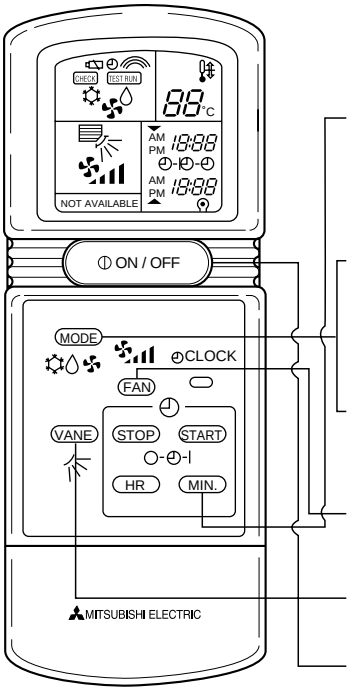
2-5 Test run

PK-1.6FLA3, PK-2FLA3
PK-2.5FLA2/3, PK-3FLA2/3/4
PK-4FLSA2/3

Measure an impedance between the power supply terminal block and ground with a 500V Megger and check that it is equal to or greater than 1.0MΩ.

(1) Turn on the main power of unit.

(2) Turn the adjusting switch on the back of the wireless remote controller to “SET” (CHECK) and (TEST RUN) will start flashing.



★(3) Push the (MIN) button (TEST RUN) and the operating mode will be displayed (Refer to the illustrated sample display at left)

★(4) Push the (MODE) button, change the mode to “FAN” and make sure that there will be blowout of air.

★(5) Push the MODE button, change the mode to COOL and make sure that there will be blowout of cool air.

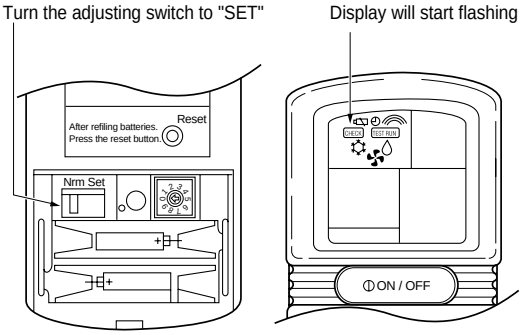
★(6) Push the (FAN) button and make sure that there will be strong (or weak) blowout of air.

★(7) Push the (VANE) button and verify the operation of the auto vane.

★(8) Push the POWER ON/OFF button and cancel the test run.

(9) After completing a test run, be sure to turn the adjusting switch back to “Nrm”.

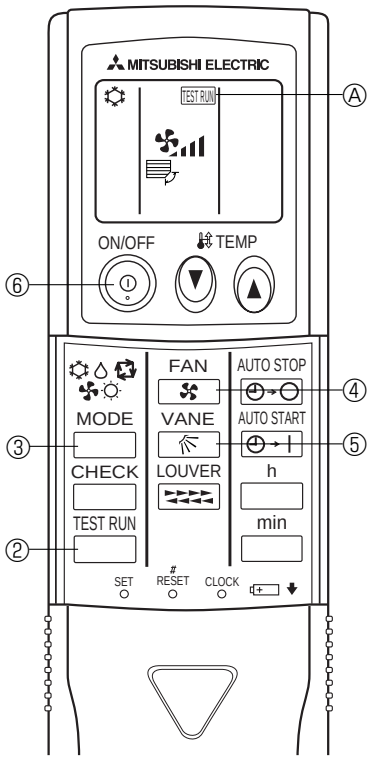
Wireless remote controller with backside battery cover removed Display will start finishing.



For operations marked "★", point the transmitter to the wireless receiver, and make sure that you will hear a short beep from the receiver.

- The test run automatically stops in 2 hours.
- Set temperature is not displayed during test run.

PK-2.5FLA4
PK-3FLA5
PK-4FLSA4



Test run

Measure an impedance between the power supply terminal block and ground with a 500V Megger and check that it is equal to or greater than 1.0MΩ.

① Turn on the main power to the unit.

② Press the TEST RUN button twice continuously.
(Start this operation from the status of remote controller display turned off.)
Ⓐ TEST RUN and current operation mode are displayed.

③ Press the MODE ( ) button to activate COOL mode, then check whether cool air is blown out from the unit.

④ Press the FAN button and check whether strong air is blown out from the unit.

⑤ Press the VANE button and check whether the auto vane operates properly.

⑥ Press the ON/OFF button to stop the test run.

Note:

- **Point the remote controller towards the indoor unit receiver while following steps ② to ⑥.**
- **It is not possible to run the in FAN, DRY mode.**

2-6 Emergency operation

When the remote controller or microprocessor malfunctions and no other trouble exists, emergency operation is available by setting the dip switch on the controller board.

[Check items]

(1) Make sure the compressor and the fans are running normally.

(2) Locate the trouble with the self-diagnostic function.
If the self-diagnostic function indicates that the protection device (such as coil frost protection) is functioning, the sources must be removed before attempting emergency operation. Emergency operation ON/OFF is activated not with the remote controller but with the circuit breaker.

[Emergency operation produce]

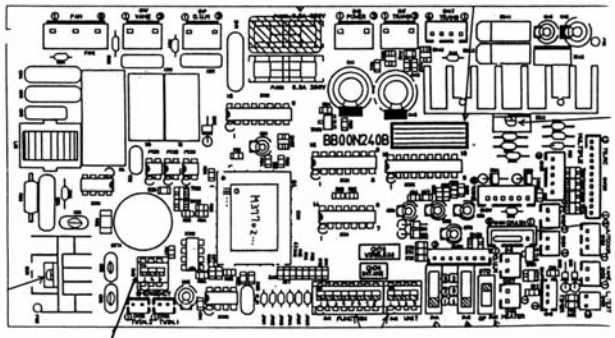
(1)Cooling operation is available by setting the dip switch SW3 ①and ② ON and ③ OFF on the indoor controller board.

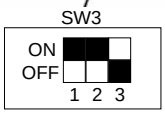
(2)To start emergency operation, turn the outdoor side circuit breaker ON first, and then the indoor side circuit breaker ON.

(3)During emergency operation, the indooor fan runs on HIGH speed, the compressor runs continuously, and the louver stops.

(4)Thermostat will not function.

(5)Do not use emergency cooling operation for more than 10 hours, as the indoor coil may freeze.





SW3 INDOOR CONTROLLER BOARD

2-7 Function of jumper wire and dip switch on indoor controller board

1. Jumper wire

① JR01:Jumper wire for the auto vanes
Cut JR01 for the unit WITHOUT auto vanes.

② JR02:Jumper wire for the temperature to start coil frost prevention
Cutting JR02 changes the temperature from +1°C to -3°C.

③ JR03:Jumper wire for set temperature adjustment in HEAT mode
In HEAT operation, heated air stagnates in the upper part of the room. The indoor unit installed in the upper part of the room will detect the air temperature higher than the actual temperature in the living space. This difference is about 4 degrees. Therefore, the temperature detected by the room temperature thermistor should be corrected 4 degrees down. The unit with JR04 attached will make this adjustment.

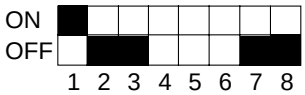
④ JR04:Jumper wire for the indoor fan speed during thermostat OFF in HEAT mode
Cutting JR04 Changes the speed from Extra-Low to Low.

⑤ JR05:Jumper wire for detecting abnormalities in the outdoor unit
Cutting JR05 makes this detection unavailable. (Occurrence of abnormality can not be detected.)

⑥ JR06:Jumper wire for auto restart function
Cutting JR06 makes the auto restart function available.

2.Dip switch

① SW1 (Function switch)

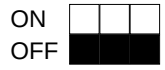
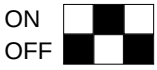
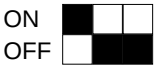


SW1-1) Switch for power supply
ON:220V
OFF:230V, 240V

SW1-2) Switch for single or twin control
ON:Twin control
OFF:Single control

SW1-3) Switch for unit number in twin control (This switch is valid when SW1-2 is ON.)
ON:Unit No.2
OFF:Unit No.1

SW1-4 ~ SW1-6) Switch for capacity of each model

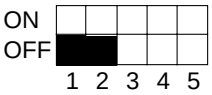
PK-1.6 PK-2.5 PK-3	PK-2	PK-4
		

SW1-7 ~ SW1-8) Switch for the pair number of wireless remote controller

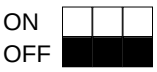
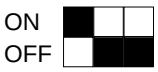
0	1	2	3
			

The pair number setting of the wireless remote controller is needed.
(Refer to the next page for the details.)

② SW2 (Unit switch)



SW2-1) Switch for air conditioner with or without electric heater
ON:Unit with electric heater
OFF:Unit without electric heater
SW2-2) Switch for air conditioner with or without heat pump
ON:Unit with heat pump
OFF:Unit without heat pump
SW2-3, SW2-4, SW2-5) Switch for function code
ON:Unit with electric heater
OFF:Unit without electric heater

PK-1.6 PK-2	PK-2.5 PK-3 PK-4
	

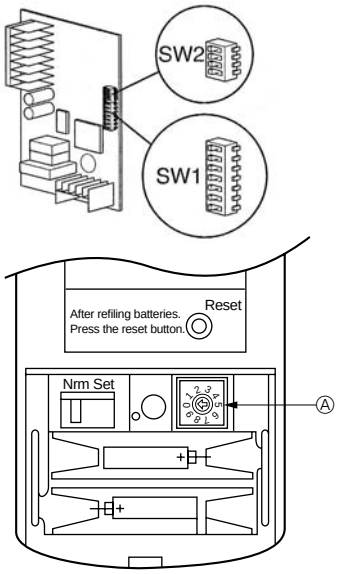
③ SW3 (Emergency operation switch)

Normal operation

For emergency cooling

2-8 Wireless remote controller pair number setting operation

PK-1.6FLA3, PK-2FLA3
PK-2.5FLA2/3, PK-3FLA2/3/4
PK-4FLSA2/3



Switches are located on the indoor unit PC board and inside the remote controller as shown.

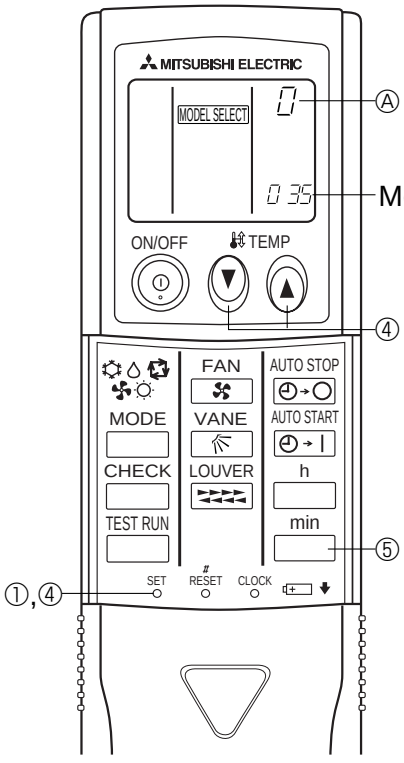
• Setting the SW1 (PC board inside indoor unit)
Sub-switches 7 or 8 of SW1 can be used as follows to assign a pair No.

Pair Number	SW1	Pair Number	SW1
0	ON OFF 1 2 3 4 5 6 7 8	2	ON OFF 1 2 3 4 5 6 7 8
1	ON OFF 1 2 3 4 5 6 7 8	3	ON OFF 1 2 3 4 5 6 7 8

• The pair No. SW of the remote controller has been set to ‹‹0›› at the time of ship-ment.

Note:
Make sure that the pair No. Ⓐ of the remote controller matches that of the indoor unit PC board.

PK-2.5FLA4
PK-3FLA5
PK-4FLSA4



① Turn on the main power to the unit.
② Press the SET button with the point of a ball-point pen or the like.
Start this operation from the status of remote controller display turned off.
MODEL SELECT blinks and Model No. is lighted.
③ Press the min button twice continuously.
Ⓐ Pair No. “0” blinks.
④ Press the temp ▼ ▲ button to set the pair number you want to set.
⑤ Press the SET button with the point of a ball-point pen or the like.
Set pair number is lighted for three seconds then turned off.

Ⓐ Pair No. of wireless remote controller	Indoor PC board < SW1 >
0	ON OFF 1 2 3 4 5 6 7 8
1	ON OFF 1 2 3 4 5 6 7 8
2	ON OFF 1 2 3 4 5 6 7 8
3~9	ON OFF 1 2 3 4 5 6 7 8

11 TROUBLESHOOTING

1. Self-diagnostic function [for PK-1.6FLA$_3$, PK-2FLA$_3$, PK-2.5FLD$_{2/3}$, PK-3FLD$_{2/3/4}$, PK-4FLSD$_{2/3}$]

(1) Turn on the main power of the unit.
(2) Set the adjusting switch on the back of the wireless remote controller to “Set” (CHECK) and (TEST RUN) will start lighting.

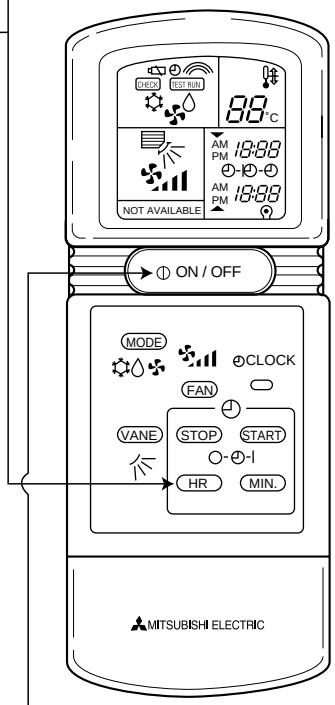
★(3) Push the (HR) button, (CHECK) will start blinking.
★(4) Send the signal from the remote controller to the unit with pressing (HR) button.
If the buzzer sound is heard and the ON/OFF lamp (unit display) blinks, refer to following table.

Buzzer sound	The number of ON/OFF lamp (Unit display) blinking
1 second (0.5 second interval) Beep	This corresponds to the number of buzzer sound

The number of ON/OFF lamp (Unit display) blinking and buzzer sound	Irregular point
1	Irregular intake sensor
2	Irregular piping sensor
4	Irregular drain sensor
5	Irregular drain pump
6	Freezing protected
8	Irregular outdoor unit
9	NO irregular

(Refer to next page in detail)

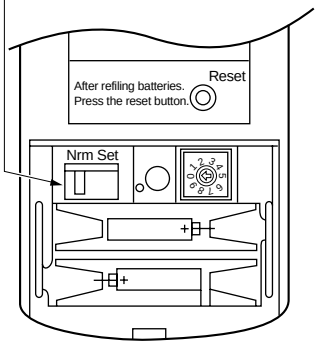
★(5) Push the POWER ON/OFF button and cancel the test run.
(6) After completing a test run, be sure to turn the adjusting switch back to “Nrm”.



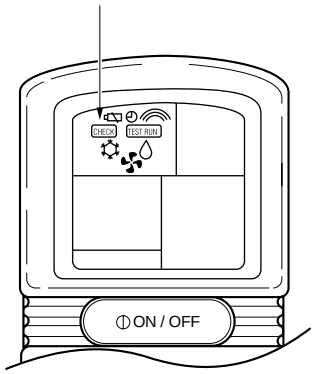
For operations marked "★", point the transmitter to the wireless receiver, and make sure that you will hear a short beep from the receiver.

Remove the battery cover on the back side of the wireless remote controller, display will start flashing when the “Set” switch is turned on.
For operations marked “★”, point the transmitter to the wireless receiver, and make sure that you will hear a short beep from the receiver.

Turn the adjusting switch to "SET"



Display will start flashing



1. Self-diagnostic function [for PK-2.5FLA4, PK-3FLA5, PK-4FLSA4]

① Turn on the main power to the unit.

② Press the CHECK button twice continuously.

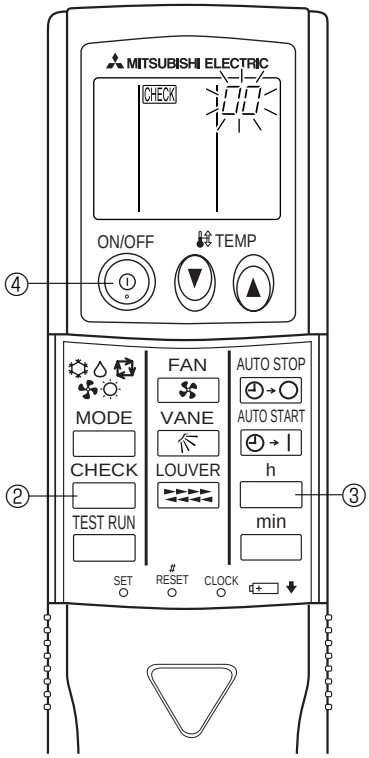
- CHECK begins to light and refrigerant address display “00” begins to blink.
- Start this operation from the status of remote controller display turned off.

③ While pointing the remote controller toward the unit’s receiver, press the h button

- If the buzzer sound is heard and the ON/OFF lamp (unit display) blinks, refer to following table.

④ While pointing the remote controller toward the unit’s receiver, press the ON/OFF button.

- Self-check mode is cancelled.



Check Code	Alarm	Buzzer sound
1	Suction sensor alarm	Single beep × 1
2	Plpe sensor alarm	Single beep × 2
3	Transmission alarm	Single beep × 3
4	Drain sensor alarm	Single beep × 4
5	Drain pump alarm	Single beep × 5
6	Anti-freezing on	Single beep × 6
	Anti-overheat on	Single beep × 6
7	System error	Single beep × 7
8	Outdoor unit alarm	Single beep × 8
9	No alarm (no error)	Receiving signal only (no error alarm)

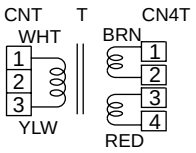
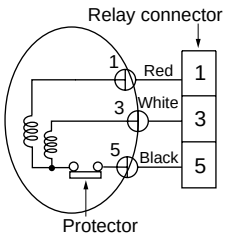
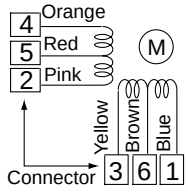
2. OTHER TROUBLES AND CAUSES

Auto vanes do not work.
- Auto vane motor does not work.
  - Auto vane motor is damaged.
  - Auto vane motor relay is damaged.
- Connector is poorly connected.
- Auto vane motor is poorly assembled.
- Indoor controller board is damaged.

Power ON/OFF button is not available.
- Indoor/outdoor connecting wire is connected incorrectly.
- Indoor/outdoor connecting wire shorts. Compressor protector is damaged.
- Outdoor controller board is defective.
- Remote controller is damaged.
  - Transmission wire is damaged.
  - Connector is poorly connected.
- Transmission wire is poorly connected

3. How to check the parts

PK-1.6FLA$_3$, PK-2FLA$_3$, PK-2.5FLA$_{2/3/4}$, PK-3FLA$_{2/3/4/5}$, PK-4FLSA$_{2/3/4}$

<table>
<tr><th>Parts name</th><th>Check points</th></tr>
<tr><td>Room temperature thermistor (RT1)
Pipe temperature thermistor (RT2)</td><td>Disconnect the connector, then measure the resistance using a tester.
(Surrounding temperature 10°C~30°C)
<table><tr><th>Normal</th><th>Abnormal</th></tr><tr><td>4.3kΩ~9.6kΩ</td><td>Open or short</td></tr></table></td></tr>
<tr><td>Transformer
 
</td><td>Disconnect the connector and measure the resistance using a tester.
<table><tr><th></th><th>Normal</th><th>Abnormal</th></tr><tr><td>CNT(1)-(3)</td><td>WHT. Approx. 135Ω</td><td rowspan="3">Open or short</td></tr><tr><td>CN4T(1)-(2)</td><td>BRN. Approx. 0.5~2.0Ω</td></tr><tr><td>CN4T(3)-(4)</td><td>RED. Approx. 1.0~2.0Ω</td></tr></table></td></tr>
<tr><td>Fan motor
 
</td><td>Measure the resistance between the terminals using a tester.
<table><tr><th rowspan="2">Motor terminal
or
Relay connector</th><th colspan="3">Normal
PK-</th><th rowspan="2">Abnormal</th></tr><tr><th>1.6FLA$_3$, 2FLA$_3$</th><th>2.5FLD$_{2/3/4}$, 3FLD$_{2/3/4/5}$</th><th>4FLSA$_{2/3/4}$</th></tr><tr><td>Red-White</td><td>114.5Ω±10%</td><td>99.5Ω±10%</td><td>62.6Ω±10%</td><td rowspan="2">Open or short</td></tr><tr><td>White-Black</td><td>118.2Ω±10%</td><td>103.5Ω±10%</td><td>74.0Ω±10%</td></tr></table>
<table><tr><td>Thermal protector</td><td>OFF : 125±5˚C
ON : 125±5˚C</td><td colspan="2">OFF : 130±5˚C
ON : 80±20˚C</td></tr></table></td></tr>
<tr><td>Vane motor
 
</td><td>Measure the resistance between the terminals using a tester. (Surrounding temperature 20°C~30°C)
<table><tr><th></th><th colspan="2">Normal</th><th>Abnormal</th></tr><tr><td></td><td>PK-1.6FLA$_3$
PK-2FLA$_3$</td><td>PK-2.5FLD$_{2/3/4}$, PK-3FLD$_{2/3/4/5}$,
PK-4FLSA$_{2/3/4}$</td><td></td></tr><tr><td>Brown-Yellow</td><td rowspan="4">15kΩ</td><td rowspan="4">186~214Ω</td><td rowspan="4">Open or short</td></tr><tr><td>Brown-Blue</td></tr><tr><td>Red-Orange</td></tr><tr><td>Red-Pink</td></tr></table></td></tr>
</table>

<Thermistor Characteristic graph>

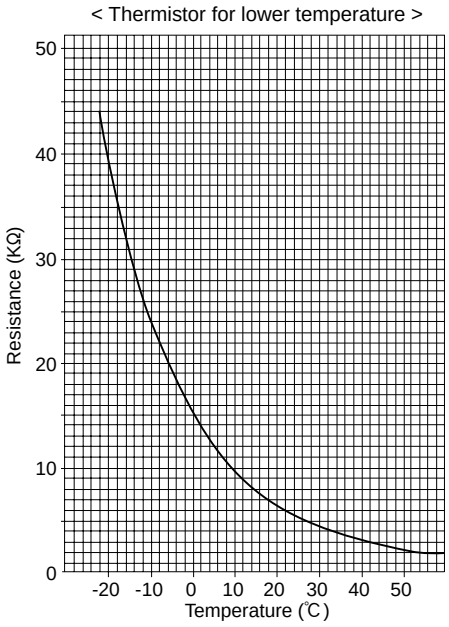
Thermistor for lower temperature

Room temperature thermistor(RT1)
Pipe temperature thermistor(RT2)

Thermistor R$_0$=15kΩ ± 3%
Fixed number of B=3480kΩ ± 2%

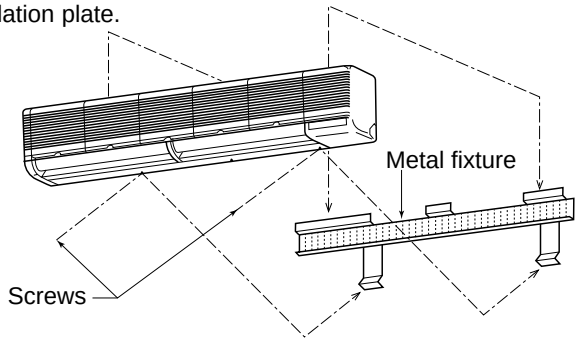
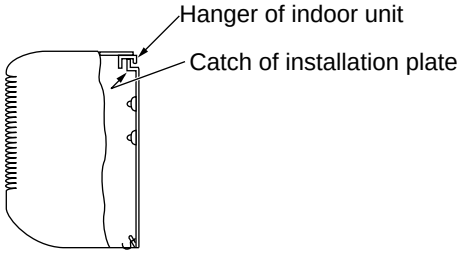
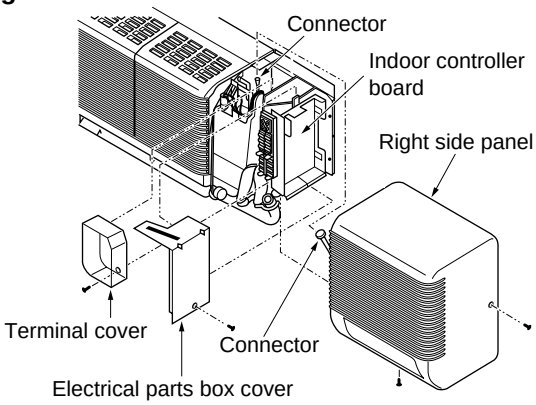
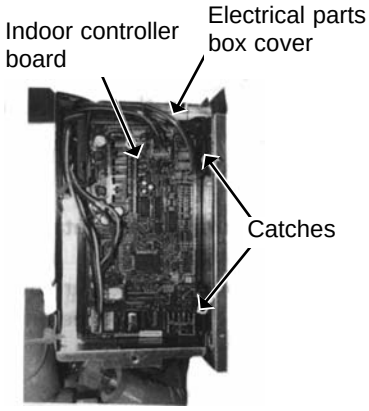
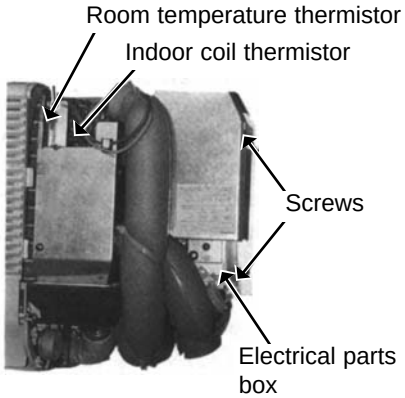
$$Rt=15\exp\{3480(\frac{1}{273+t}-\frac{1}{273})\}$$

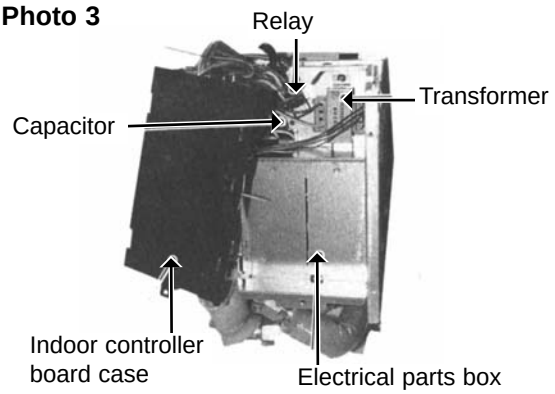
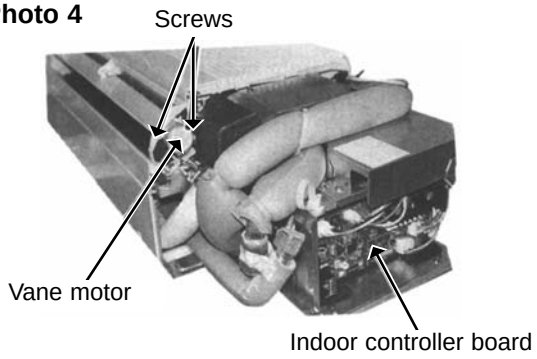
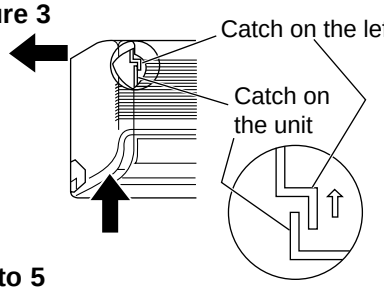
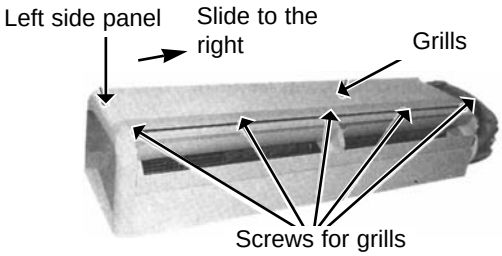
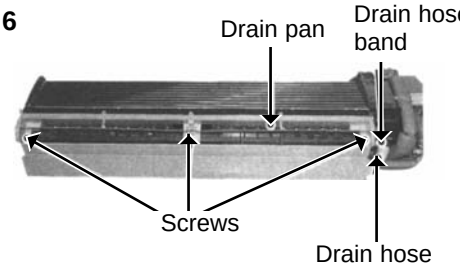
0˚C 15kΩ
10˚C 9.6kΩ
20˚C 6.3kΩ
25˚C 5.4kΩ
30˚C 4.3kΩ
40˚C 3.0kΩ



12 DISASSEMBLY PROCEDURE

PK-1.6FLA$_3$, PK-2FLA$_3$, PK-2.5FLA$_{2/3/4}$, PK-3FLA$_{2/3/4/5}$, PK-4FLSA$_{2/3/4}$

OPERATING PROCEDURE	PHOTOS&ILLUSTRATION
1. Removing the lower side of the indoor unit from the installation plate (1) Remove the 2 screws. Hang the indoor unit hangers to the catches on the installation plate. 	**Figure 1** 
2. Removing the right side panel (1) Remove the 2 screws of the right side panel:one on the bottom and the other on the upper right-hand side. (2) Disconnect the connector from the adapter case. (3) Sliding the right side panel to the right, pull it out toward you.	**Figure 2** 
3. Removing the indoor controller board (1) Remove the right side panel. (2) Remove the screw of the electrical parts box cover, and remove the cover. (3) Disconnect the connectors on the indoor controller board. (4) To unhook the catches on the right-hand side of the indoor controller board, pull the left-hand side toward you and lift up the cover to the right. Then the indoor controller board can be removed.	**Photo 1** 
4. Removing the electrical parts box (1) Remove the right side panel. (2) Remove the screw of the electrical parts box cover, and remove the cover. (3) Remove the room temperature thermistor and the indoor coil thermistor. (4) Disconnect the vane motor connector on the indoor controller board. (5) Remove the 2 screws of the electrical parts box. (6) Disconnect the connector of the heater lead wire connector. (7) Disconnect the connector of the fan motor lead wire. (8) Remove the electrical parts box.	**Photo 2** 

OPERATING PROCEDURE	PHOTOS&ILLUSTRATION
(9) Remove the screws of the indoor controller board case, and pull out the indoor controller board case. Then the transformer and the capacitor and relay can be serviced.	**Photo 3** 
5. Removing the vane motor (1) Remove the right side panel. (2) Remove the screw of the electrical parts box cover, and remove the cover. (3) Remove the 2 screws of the vane motor, and remove the motor from the shaft. (4) Disconnect the vane motor connector on the indoor controller board.	**Photo 4** 
6 Removing the intake grills (1) Remove the right side panel. (2) To remove the left side panel, remove the screw on the bottom and the screw on the upper left-hand side. (See Figure 3.) 1. Press up this side of the left side panel to unhook the catch on the panel from the catch on the unit. 2. Slide the left side panel to the left to remove the panel. Note: Fix the unit to the metal fixture securely (3) Remove the air filters. (4) Hold and press the centre cover to remove. (5) Remove the screws of the grills. (6) Pull the lower side of the grill toward you and slide the upper to the right to remove the grills.	**Figure 3**  **Photo 5** 
7. Removing the drain pan (1) Remove the left and right side panels. (2) Remove the grills. (3) Remove the electrical parts box cover. (4) Loosen the drain hose band to remove. (5) Remove the 3 screws of the drain pan, and slide the drain pan toward you to remove.	**Photo 6** 

OPERATING PROCEDURE	PHOTOS

8. Removing the lineflow fan and the fan motor

(1) Remove the left and right side panels.
(2) Remove the grills.
(3) Remove the electrical parts box.
(4) Remove the drain pan.
(5) Loosen the screw that fixes the lineflow fan to the fan motor. (See Photo 7.)
(6) Remove the 4 screws of the motor fixture, and remove the fan motor and the motor fixture at a time (See Photo 8.)
(7) Remove the screws of the left and right motor supports, and remove the motor supports and the fan motor. (See Photo 9.)
(8) Remove the screw of the centre support, and remove the support. (See Photo 10.)
(9) Remove the 2 screws on the left and right sides of the heat exchanger, and pull the bearing support toward you. (See Photo 11.)
(10) Pull the left-hand side of the heat exchanger toward you, and remove the lineflow fan.

Photo 7

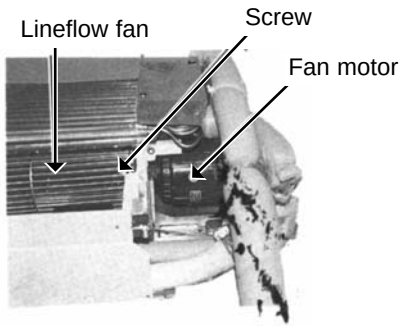


Photo 8

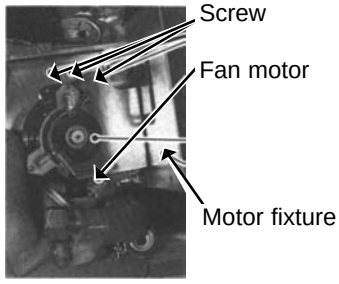


Photo 11

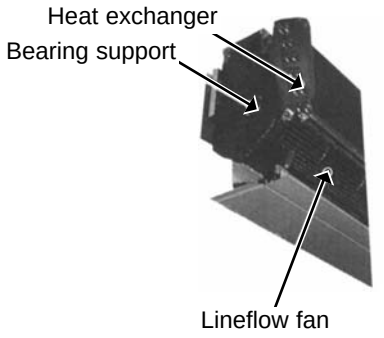


Photo 9

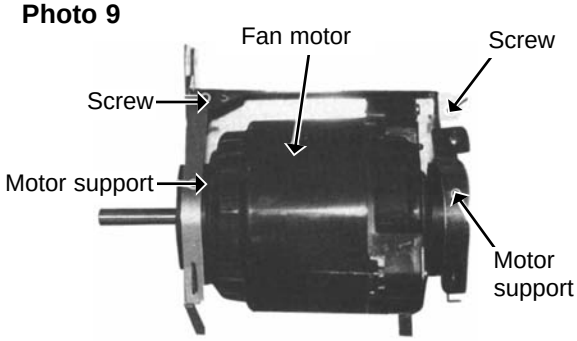
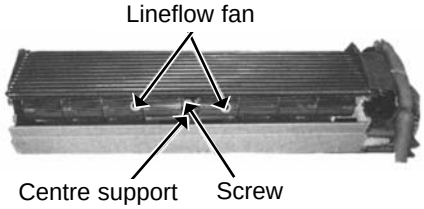
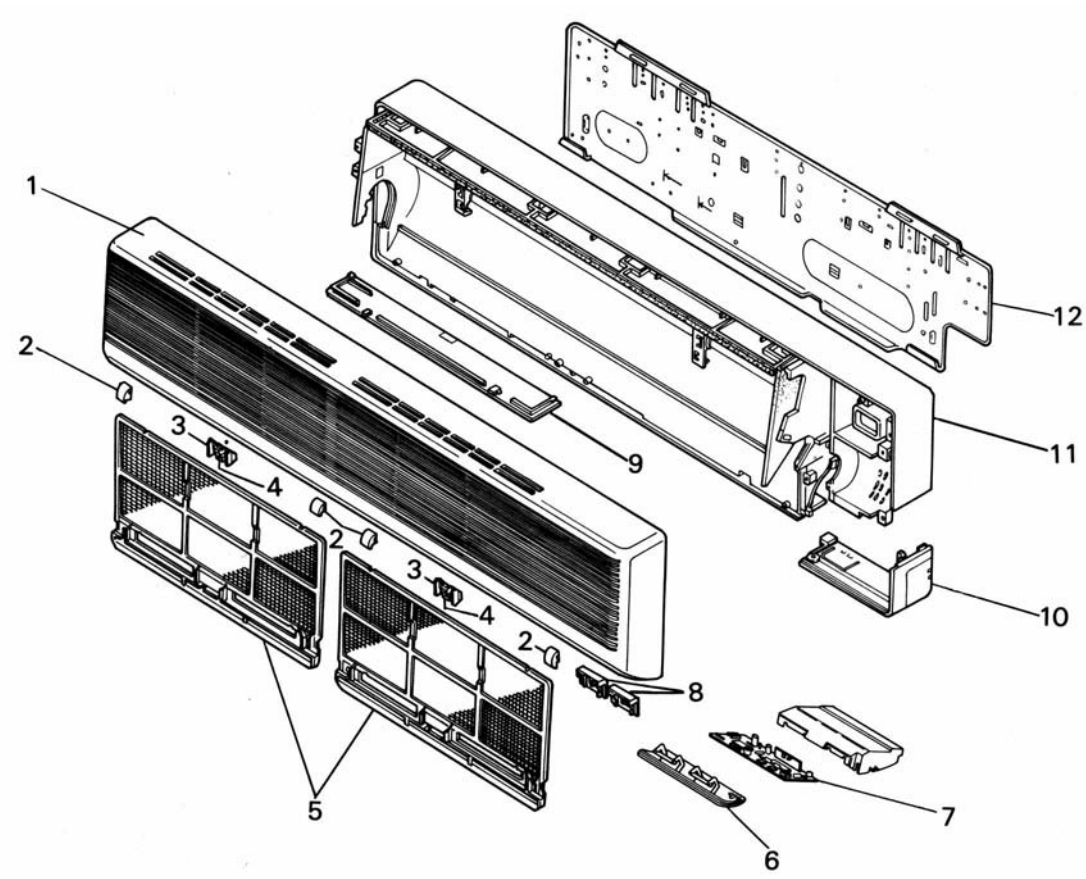


Photo 10



13 PARTS LIST

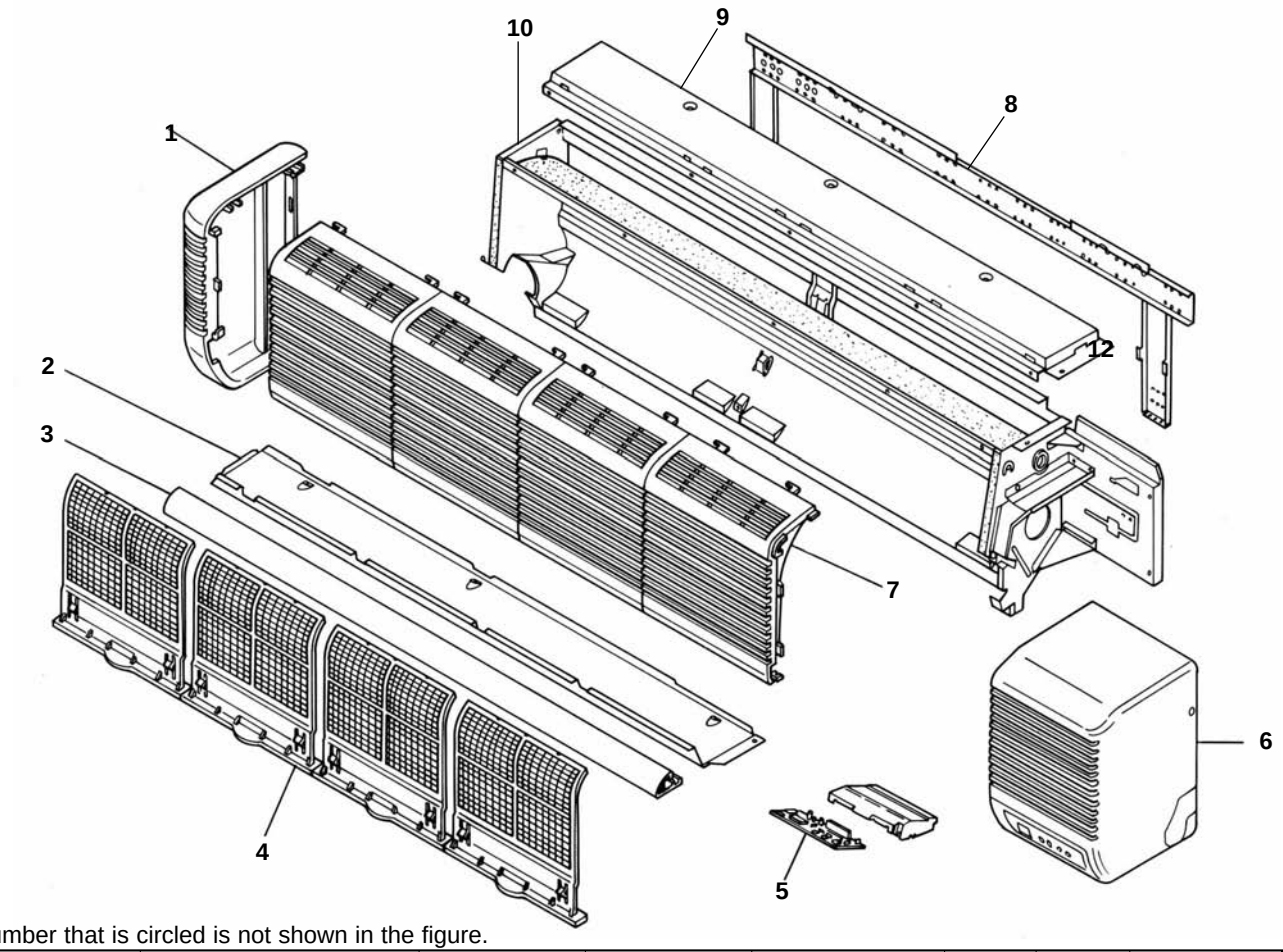
STRUCTURAL PARTS
PK-1.6FLA, PK-1.6FLA$_1$, PK-1.6FLA$_2$, PK-1.6FLA$_3$
PK-2FLA, PK-2FLA$_1$, PK-2FLA$_2$, PK-2FLA$_3$



No.	Part No.	Part name	Specification	Q'ty/set		Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PK-1.6,PK-2					Unit	Amount
				FLA	FLA$_1$ FLA$_2$ FLA$_3$					
1	R01 KV5 651	FRONT PANEL		1						
	R01 47J 651	FRONT PANEL			1					
2	R01 KV5 096	SCREW CAP		4	4					
3	—	CATCH HOLDER		2	2	(BG25R572H06)				
4	R01 A20 054	FILTER CATCH		2	2					
5	R01 KV5 500	AIR FILTER		2						
	R01 47J 500	AIR FILTER			2					
6	T7W 570 058	SERVICE PANEL		1	1					
7	T7W 570 317	WIRELESS ADAPTER		1	1		W.B			
8	—	PANEL CATCH		2	2	(BG25G057H07)				
9	R01 KV5 623	UNDER COVER		1	1					
10	R01 KV5 658	CORNER COVER		1	1					
11	R01 KV5 635	BOX ASSEMBLY		1	1					
12	R01 KV5 808	BACK PLATE		1	1					

STRUCTURAL PARTS

PK-2.5FLA, PK-2.5FLA$_1$, PK-2.5FLA$_2$, PK-2.5FLA$_3$, PK-2.5FLA$_4$

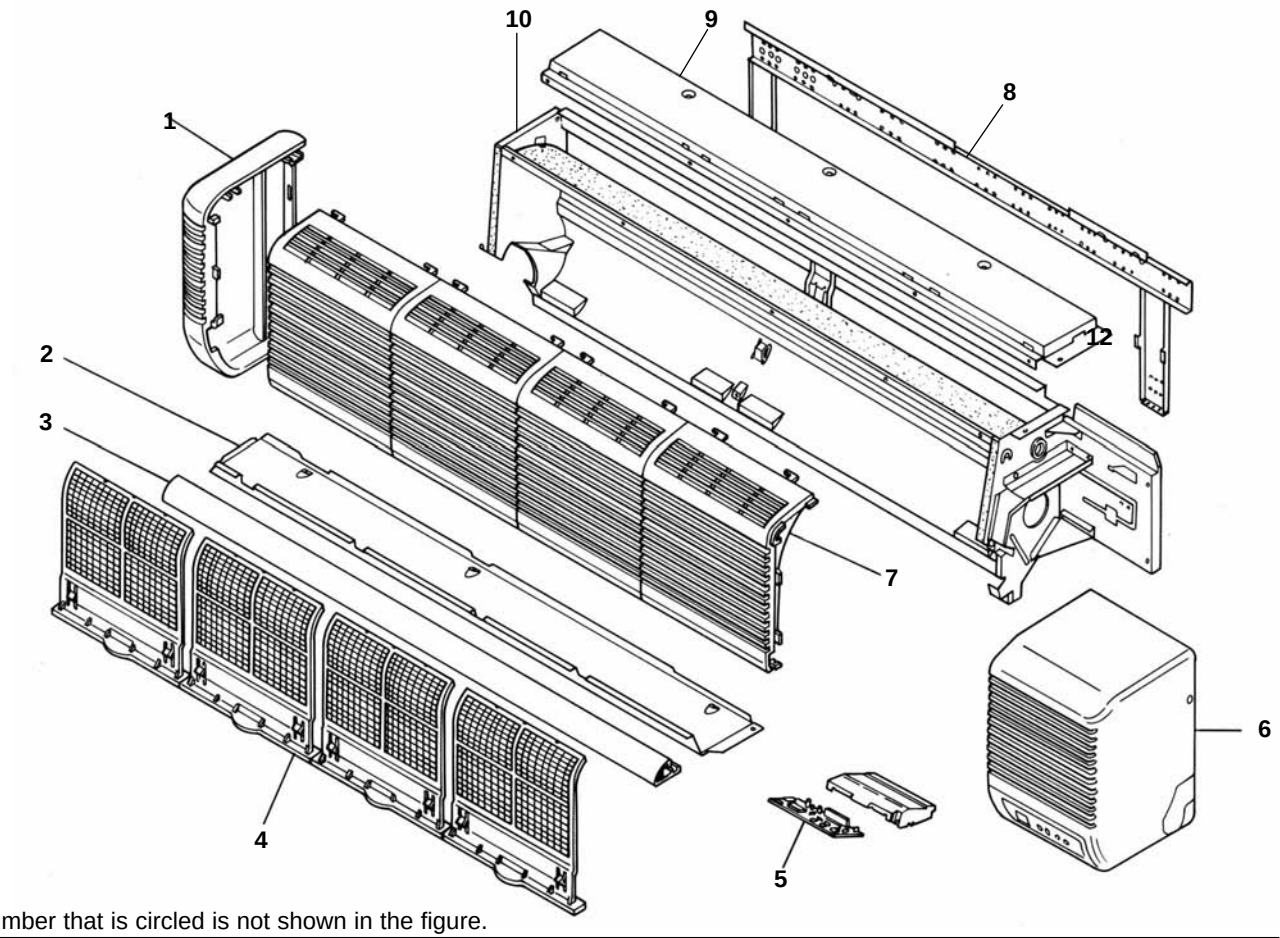


Part number that is circled is not shown in the figure.

No.	Part No.	Part name	Specification	Q'ty/set		Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PK-2.5 FLA FLA$_1$ FLA$_2$	PK-2.5 FLA$_3$ FLA$_4$				Unit	Amount
1	R01 12G 662	LEFT SIDE PANEL		1	1					
2	R01 12G 812	UNDER PLATE		1						
	R01 E01 812	UNDER PLATE			1					
3	R01 12G 811	NOSE		1						
	R01 E00 811	NOSE			1					
4	R01 A17 500	AIR FILTER		4	4					
5	T7W 570 317	WIRELESS ADAPTER		1	1		W.B			
6	R01 12G 661	RIGHT SIDE PANEL		1	1					
7	R01 12G 691	INTAKE GRILLE		2	2					
8	R01 12G 808	BACK PLATE		1	1					
9	R01 E01 641	TOP PLATE		1	1					
10	—	BOX ASSEMBLY		1		(BG00A593G89)				
	—	BOX ASSEMBLY			1	(RG00A734G61)				
⑪	R01 12G 523	DRAIN SOCKET		1	1					
⑫	R01 24K 658	RECEIVER		1	1					

STRUCTURAL PARTS

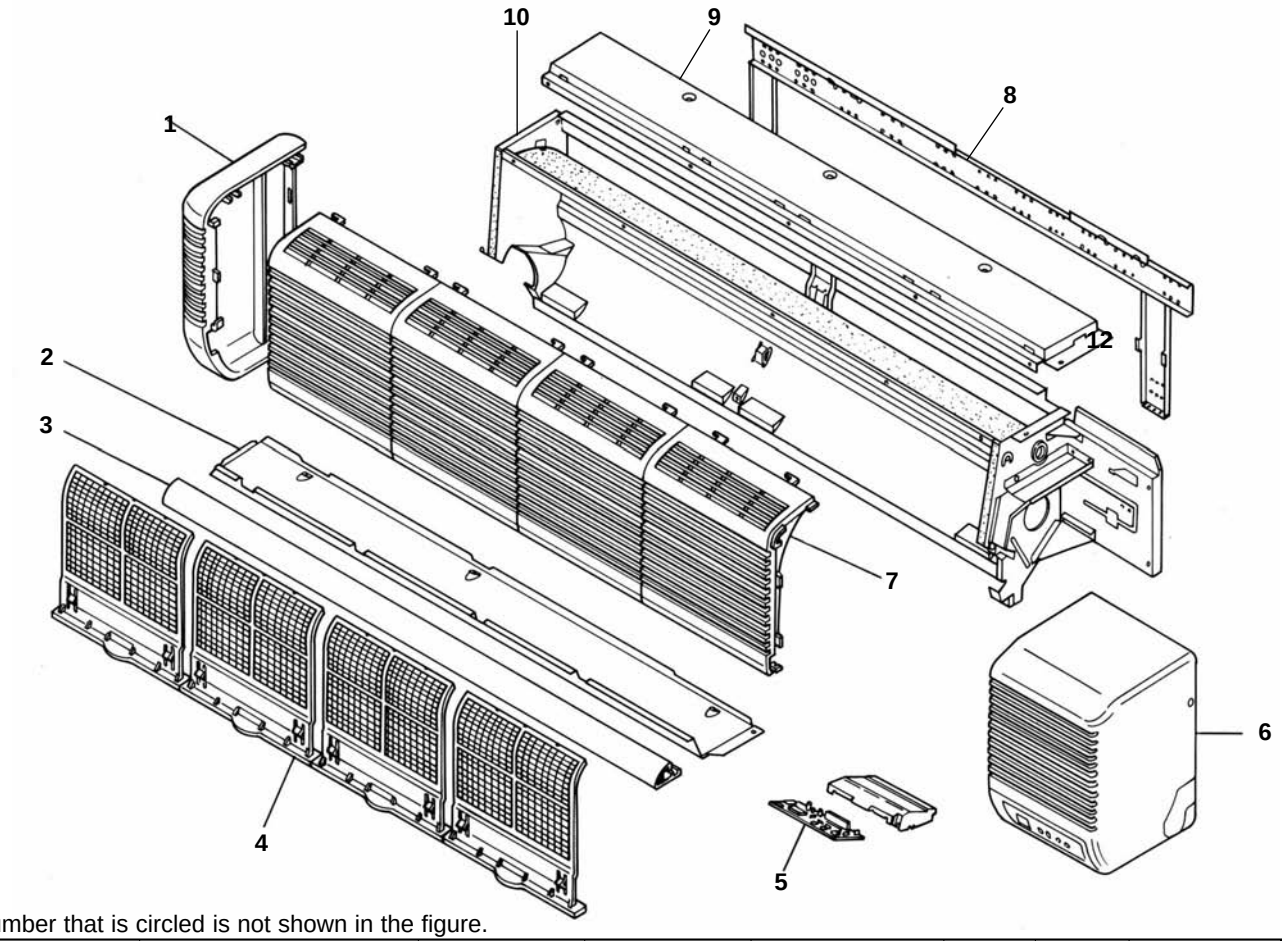
PK-3FLA, PK-3FLA$_1$, PK-3FLA$_2$, PK-3FLA$_3$, PK-3FLA$_4$, PK-3FLA$_5$



Part number that is circled is not shown in the figure.

No.	Part No.	Part name	Specification	Q'ty/set			Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PK-3 FLA FLA$_1$ FLA$_2$	PK-3 FLA$_3$	PK-3 FLA$_4$ FLA$_5$				Unit	Amount
1	R01 12G 662	LEFT SIDE PANEL		1	1	1					
2	R01 12G 812	UNDER PLATE		1	1						
	R01 E01 812	UNDER PLATE				1					
3	R01 12G 811	NOSE		1	1						
	R01 E00 811	NOSE				1					
4	R01 A17 500	AIR FILTER		4	4	4					
5	T7W 570 317	WIRELESS ADAPTER		1	1	1		W.B			
6	R01 12G 661	RIGHT SIDE PANEL		1	1	1					
7	R01 12G 691	INTAKE GRILLE		2	2	2					
8	R01 12G 808	BACK PLATE		1	1	1					
9	R01 E01 641	TOP PLATE		1	1	1					
10	—	BOX ASSEMBLY		1	1		(BG00A593G89)				
	—	BOX ASSEMBLY				1	(RG00A734G61)				
⑪	R01 12G 523	DRAIN SOCKET		1	1	1					
⑫	R01 24K 658	RECEIVER		1	1	1					

STRUCTURAL PARTS
PK-4FLSA, PK-4FLSA$_1$, PK-4FLSA$_2$, PK-4FLSA$_3$, PK-4FLSA$_4$

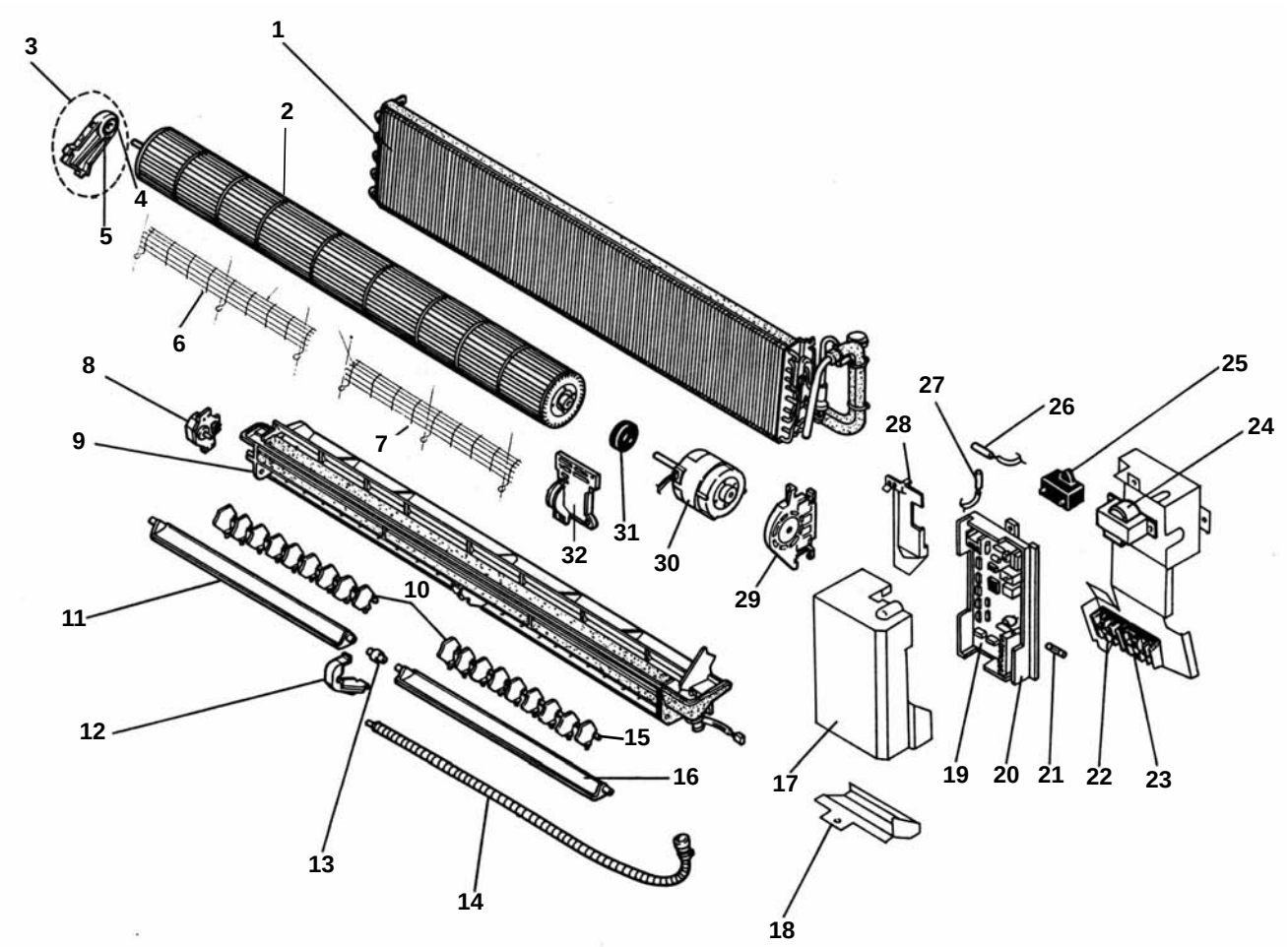


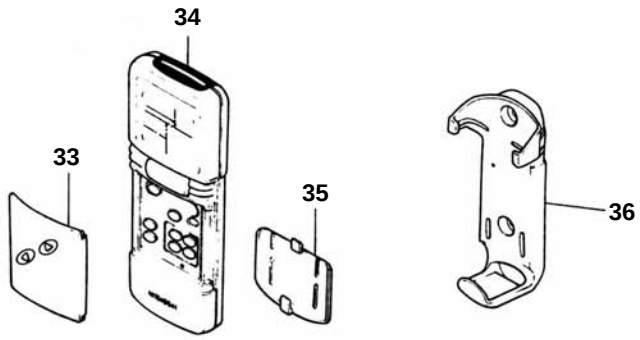
Part number that is circled is not shown in the figure.

No.	Part No.	Part name	Specification	Q'ty/set		Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PK-4 FLSA FLSA$_1$ FLSA$_2$	PK-4 FLSA$_3$ FLSA$_4$				Unit	Amount
1	R01 12G 662	LEFT SIDE PANEL		1	1					
2	R01 16G 812	UNDER PLATE		1						
	R01 E00 812	UNDER PLATE			1					
3	R01 16G 811	NOSE		1						
	R01 E01 811	NOSE			1					
4	R01 A17 500	AIR FILTER		5	5					
5	T7W 570 317	WIRELESS ADAPTER		1	1		W.B			
6	R01 12G 661	RIGHT SIDE PANEL		1	1					
7	R01 12G 691	INTAKE GRILLE		2	2					
8	R01 16G 808	BACK PLATE		1	1					
9	R01 E00 641	TOP PLATE		1	1					
10	—	BOX ASSEMBLY		1		(BG00A593G89)				
	—	BOX ASSEMBLY			1	(RG00A734G62)				
⑪	R01 12G 523	DRAIN SOCKET		1	1					
⑫	R01 24K 658	RECEIVER		1	1					
⑬	R01 16G 692	INTAKE GRILLE		1	1					

ELECTRICAL PARTS

PK-1.6FLA, PK-1.6FLA$_1$, PK-1.6FLA$_2$, PK-1.6FLA$_3$
PK-2FLA, PK-2FLA$_1$, PK-2FLA$_2$, PK-2FLA$_3$

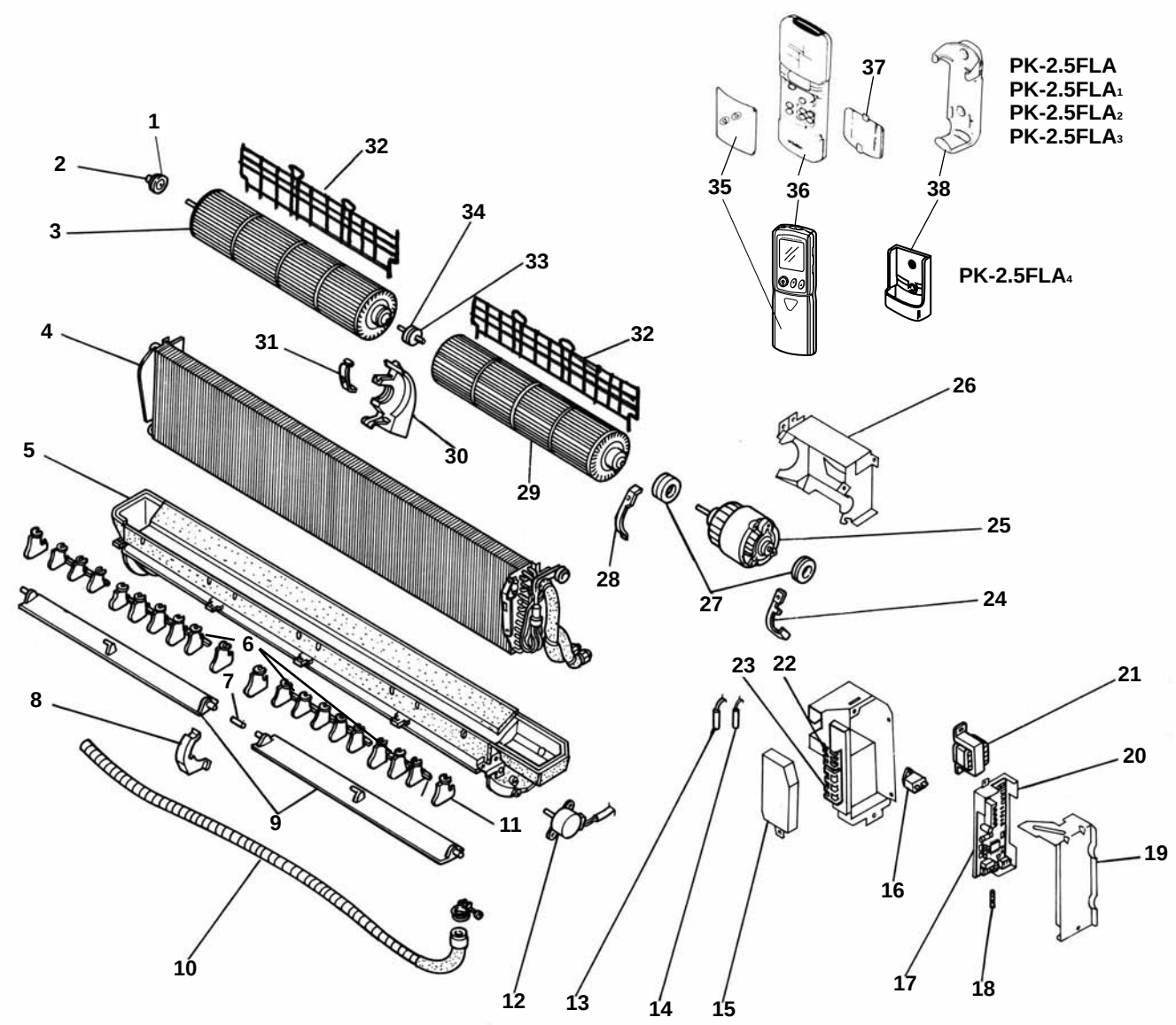




Parts number that is circled is not shown in the figure.

No.	Part No.	Part name	Specification	Q'ty/set						Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PK-1.6			PK-2						Unit	Amount
				FLA	FLA_1	FLA_2 FLA_3	FLA	FLA_1	FLA_2 FLA_3					
1	T7W 570 480	HEAT EXCHANGER		1	1	1								
	R01 21A 480	HEAT EXCHANGER					1	1	1					
2	R01 KV5 114	LINEFLOW FAN		1	1	1	1	1	1					
3	R01 KV5 106	BEARING SUPPORT		1	1	1	1	1	1					
4	R01 566 103	SLEEVE BEARING		1	1	1	1	1	1					
5	R01 KV5 102	BEARING MOUNT		1	1	1	1	1	1					
6	T7W 52J 675	FAN GUARD				1			1					
7	T7W 51J 675	FAN GUARD				1			1					
8	R01 KV5 223	VANE MOTOR		1	1	1	1	1	1		MV			
9	R01 KV5 530	NOZZLE ASSEMBLY		1	1	1	1	1	1					
10	R01 KV5 038	GUIDE VANE		16	16	16	16	16	16					
11	R01 KW1 002	LEFT ROTARY VANE		1	1	1	1	1	1					
12	R01 KV5 048	CENTER SUPPORT		1	1	1	1	1	1					
13	—	VANE SLEEVE		1	1	1	1	1	1	(BG25M017H06)				
14	R01 71G 527	DRAIN HOSE		1	1	1	1	1	1					
15	R01 KV5 059	ARM		2	2	2	2	2	2					
16	R01 KW2 002	RIGHT ROTARY VANE		1	1	1	1	1	1					
17	—	CONTROL BOX COVER		1	1	1	1	1	1	(BG02A326G06)				
18	—	TERMINAL COVER		1	1	1	1	1	1	(BG02B718H05)				
19	T7W 520 310	CONTROLLER BOARD		1	1		1	1			I.B			
	T7W 27K 310	CONTROLLER BOARD				1			1		I.B			
20	—	CONTROLLER CASE		1	1	1	1	1	1	(BG25B573H05)				
21	R01 520 239	FUSE	250V 6.3A	2	2	2	2	2	2		F1,2<I.B>			
22	T7W 514 716	TERMINAL BLOCK	3P(L,N,⏚)	1	1	1	1	1	1		TB2			
23	T7W 512 716	TERMINAL BLOCK	2P(1/2)	1	1	1	1	1	1		TB5			
24	T7W 552 799	TRANSFORMER		1	1		1	1			T			
	T7W 52J 799	TRANSFORMER				1			1		T			
25	R01 588 255	RUN CAPACITOR	2.0μF 440V	1	1	1	1	1	1		C1			
26	R01 KN7 202	INDOOR COIL THERMISTOR		1	1	1	1	1	1		RT2			
27	R01 J07 202	ROOM TEMPERATURE THERMISTOR		1			1				RT1			
	R01 06A 202	ROOM TEMPERATURE THERMISTOR			1	1		1	1		RT1			
28	—	WATER SHIELD		1	1	1	1	1	1	(BG25B846H11)				
29	R01 KV5 130	MOTOR SUPPORT		1	1	1	1	1	1					
30	T7W 570 762	FAN MOTOR	PK4V30-KA	1	1	1	1	1	1		MF			
31	R01 KV5 105	RUBBER MOUNT		1	1	1	1	1	1					
32	R01 KV5 135	MOTOR COVER		1	1	1	1	1	1					
33	R01 58A 049	REMOTE CONTROLLER DOOR		1	1	1	1	1	1					
34	T7W 570 200	REMOTE CONTROLLER		1	1		1	1			W.R			
	T7W 56J 200	REMOTE CONTROLLER				1			1		W.R			
35	R01 58A 050	BATTERY COVER		1	1	1	1	1	1					
36	R01 18G 075	REMOTE CONTROLLER HOLDER		1	1	1	1	1	1					
㊲	R01 12G 523	DRAIN SOCKET		1	1	1	1	1	1					

ELECTRICAL PARTS
PK-2.5FLA, PK-2.5FLA$_1$, PK-2.5FLA$_2$, PK-2.5FLA$_3$, PK-2.5FLA$_4$

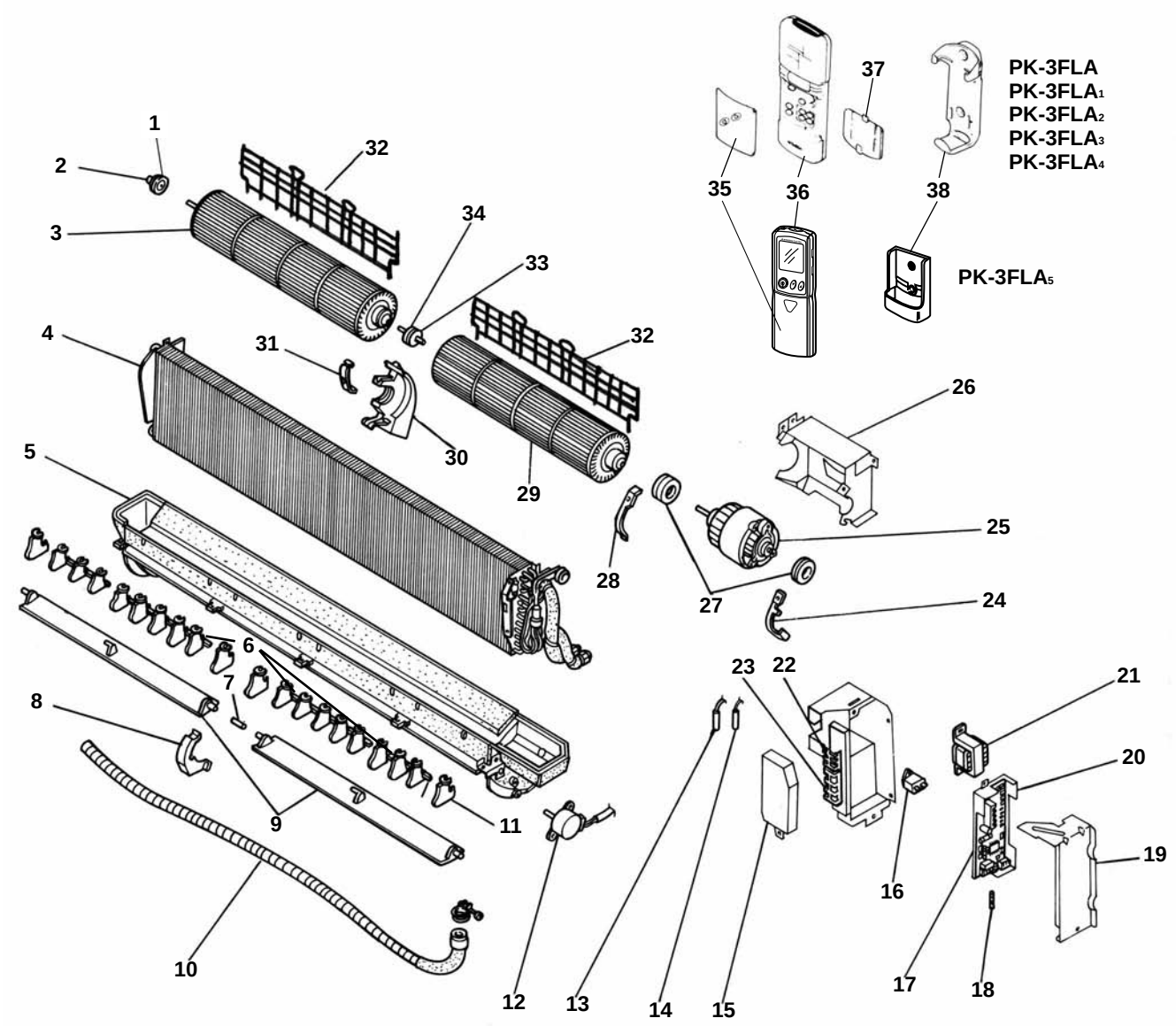


No.	Part No.	Part name	Specification	Q'ty/set				Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PK-2.5							Unit	Amount
				FLA	FLA$_1$ FLA$_2$	FLA$_3$	FLA$_4$					
1	R01 005 103	SLEEVE BEARING		1	1	1	1					
2	R01 Z61 102	BEARING MOUNT		1	1	1	1					
3	R01 13G 114	LEFT LINEFLOW FAN		1	1	1	1					
4	T7W 572 480	HEAT EXCHANGER		1	1	1	1					
5	R01 12G 529	DRAIN PAN		1	1							
	T7W E13 529	DRAIN PAN				1	1					
6	—	ARM		3	3	3	3	(BG25H301H02)				
7	R01 12G 063	JOINT SHAFT		1	1	1	1					
8	R01 12G 621	CENTER COVER		1	1	1	1					

No.	Part No.	Part name	Specification	Q'ty/set				Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PK-2.5							Unit	Amount
				FLA	FLA_1 FLA_2	FLA_3	FLA_4					
9	R01 12G 002	AUTO VANE		2	2	2	2					
10	R01 KV5 527	DRAIN HOSE		1	1	1	1					
11	—	GUIDE VANE		20	20	20	20	(BG25J821H01)				
	—	GUIDE VANE (WITH HANDLE)		4	4	4	4	(BG25J821H02)				
12	R01 12G 223	VANE MOTOR		1	1	1	1		MV			
13	R01 06A 202	ROOM TEMPERATURE THERMISTOR		1	1	1	1		RT1			
14	R01 KL5 202	INDOOR COIL THERMISTOR		1	1	1	1		RT2			
15	—	TERMINAL COVER		1	1	1	1	(BG02J608H07)				
16	R01 588 255	RUN CAPACITOR	2.0μF 440V	1	1	1	1		C			
17	T7W 560 310	CONTROLLER BOARD		1					I.B			
	T7W 27K 310	CONTROLLER BOARD			1	1	1		I.B			
18	T7W 520 239	FUSE	250V 6.3A	2	2	2	2		F1,2<I.B>			
19	—	CONTROLLER COVER		1	1	1	1	(BG02A648G02)				
20	—	CONTROLLER CASE		1	1	1	1	(BG25B573H06)				
21	T7W 552 799	TRANSFORMER		1					T			
	T7W 51J 799	TRANSFORMER			1	1	1		T			
22	T7W 512 716	TERMINAL BLOCK	2P(1/2)	1	1	1	1		TB4			
23	T7W 509 716	TERMINAL BLOCK	3P(L,N,⏚)	1	1	1	1		TB2			
24	—	MOTOR BAND		1	1	1	1	(BG02H065H01)				
25	R01 12G 220	FAN MOTOR		1	1	1	1		MF			
26	—	MOTOR LEG		1	1	1	1	(BG02A534H16)				
27	R01 12G 105	RUBBER MOUNT		2	2	2	2					
28	—	MOTOR BAND		1	1	1	1	(BG02H178H01)				
29	R01 13G 115	RIGHT LINEFLOW FAN		1	1	1	1					
30	—	CENTER SUPPORT		1	1	1	1	(BG00R259G07)				
31	—	BEARING BAND		1	1	1	1	(BG02L462H02)				
32	T7W 53J 675	FAN GUARD			2	2	2					
33	R01 12G 103	SLEEVE BEARING		1	1	1	1					
34	R01 KV5 102	BEARING MOUNT		1	1	1	1					
35	R01 58A 049	REMOTE CONTROLLER DOOR		1	1	1						
	R01 E01 049	REMOTE CONTROLLER DOOR					1					
36	T7W 570 200	REMOTE CONTROLLER		1	1	1			W.R			
	T7W E06 714	REMOTE CONTROLLER					1		W.R			
37	R01 58A 050	BATTERY COVER		1	1	1						
38	R01 18G 075	REMOTE CONTROLLER HOLDER		1	1	1						
	R01 E00 075	REMOTE CONTROLLER HOLDER					1					

ELECTRICAL PARTS

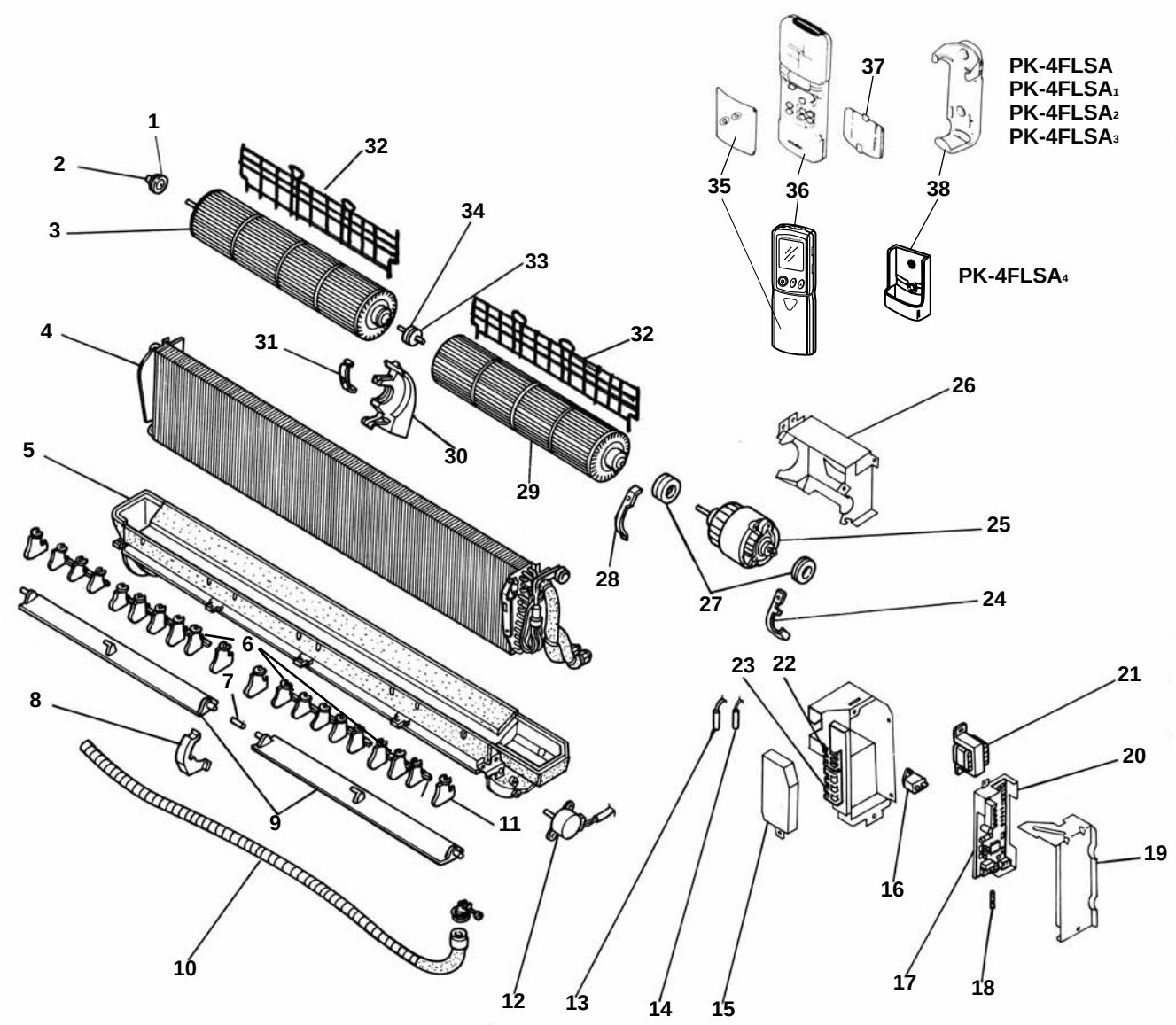
PK-3FLA, PK-3FLA$_1$, PK-3FLA$_2$, PK-3FLA$_3$, PK-3FLA$_4$, PK-3FLA$_5$



No.	Part No.	Part name	Specification	Q'ty/set				Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PK-3							Unit	Amount
				FLA	FLA$_1$ FLA$_2$ FLA$_3$	FLA$_4$	FLA$_5$					
1	R01 005 103	SLEEVE BEARING		1	1	1	1					
2	R01 Z61 102	BEARING MOUNT		1	1	1	1					
3	R01 13G 114	LEFT LINEFLOW FAN		1	1	1	1					
4	T7W 573 480	HEAT EXCHANGER		1	1	1	1					
5	R01 12G 529	DRAIN PAN		1	1							
	T7W E13 529	DRAIN PAN				1	1					
6	—	ARM		3	3	3	3	(BG25H301H02)				
7	R01 12G 063	JOINT SHAFT		1	1	1	1					
8	R01 12G 621	CENTER COVER		1	1	1	1					

No.	Part No.	Part name	Specification	Q'ty/set				Remarks. (Drawing No.)	Wiring Diagram Symbol	Recom-mended Q'ty	Price	
				PK-3							Unit	Amount
				FLA	FLA_1 FLA_2 FLA_3	FLA_4	FLA_5					
9	R01 12G 002	AUTO VANE		2	2	2	2					
10	R01 KV5 527	DRAIN HOSE		1	1	1	1					
11	—	GUIDE VANE		20	20	20	20	(BG25J821H01)				
	—	GUIDE VANE (WITH HANDLE)		4	4	4	4	(BG25J821H02)				
12	R01 12G 223	VANE MOTOR		1	1	1	1		MV			
13	R01 06A 202	ROOM TEMPERATURE THERMISTOR		1	1	1	1		RT1			
14	R01 KL5 202	INDOOR COIL THERMISTOR		1	1	1	1		RT2			
15	—	TERMINAL COVER		1	1	1	1	(BG02J608H07)				
16	R01 588 255	RUN CAPACITOR	2.0μF 440V	1	1	1	1		C			
17	T7W 560 310	CONTROLLER BOARD		1					I.B			
	T7W 27K 310	CONTROLLER BOARD			1	1	1		I.B			
18	T7W 520 239	FUSE	250V 6.3A	2	2	2	2		F1,2<I.B>			
19	—	CONTROLLER COVER		1	1	1	1	(BG02A648G02)				
20	—	CONTROLLER CASE		1	1	1	1	(BG25B573H06)				
21	T7W 552 799	TRANSFORMER		1					T			
	T7W 51J 799	TRANSFORMER			1	1	1		T			
22	T7W 512 716	TERMINAL BLOCK	2P(1/2)	1	1	1	1		TB4			
23	T7W 509 716	TERMINAL BLOCK	3P(L,N,⏚)	1	1	1	1		TB2			
24	—	MOTOR BAND		1	1	1	1	(BG02H065H01)				
25	R01 12G 220	FAN MOTOR		1	1	1	1		MF			
26	—	MOTOR LEG		1	1	1	1	(BG02A534H16)				
27	R01 12G 105	RUBBER MOUNT		2	2	2	2					
28	—	MOTOR BAND		1	1	1	1	(BG02H178H01)				
29	R01 13G 115	RIGHT LINEFLOW FAN		1	1	1	1					
30	—	CENTER SUPPORT		1	1	1	1	(BG00R259G07)				
31	—	BEARING BAND		1	1	1	1	(BG02L462H02)				
32	T7W 53J 675	FAN GUARD			2	2	2					
33	R01 12G 103	SLEEVE BEARING		1	1	1	1					
34	R01 KV5 102	BEARING MOUNT		1	1	1	1					
35	R01 58A 049	REMOTE CONTROLLER DOOR		1	1	1						
	R01 E01 049	REMOTE CONTROLLER DOOR					1					
36	T7W 570 200	REMOTE CONTROLLER		1	1	1			W.R			
	T7W E06 714	REMOTE CONTROLLER					1		W.R			
37	R01 58A 050	BATTERY COVER		1	1	1						
38	R01 18G 075	REMOTE CONTROLLER HOLDER		1	1	1						
	R01 E00 075	REMOTE CONTROLLER HOLDER					1					

ELECTRICAL PARTS
PK-4FLSA, PK-4FLSA$_1$, PK-4FLSA$_2$, PK-4FLSA$_3$, PK-4FLSA$_4$



No.	Part No.	Part name	Specification	Q'ty/set PK-4 FLSA	FLSA$_1$ FLSA$_2$	FLSA$_3$	FLSA$_4$	Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price Unit	Price Amount
1	R01 005 103	SLEEVE BEARING		1	1	1	1					
2	R01 Z61 102	BEARING MOUNT		1	1	1	1					
3	R01 17G 114	LEFT LINEFLOW FAN		1	1	1	1					
4	T7W 574 480	HEAT EXCHANGER		1								
	R01 46G 480	HEAT EXCHANGER			1	1	1					
5	R01 16G 529	DRAIN PAN		1	1							
	T7W E14 529	DRAIN PAN				1	1					
6	—	ARM		4	4	4	4	(BG25H301H02)				
7	R01 12G 063	JOINT SHAFT		1	1	1	1					
8	R01 12G 621	CENTER COVER		1	1	1	1					

No.	Part No.	Part name	Specification	Q'ty/set				Remarks. (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PK-4							Unit	Amount
				FLSA	$FLSA_1$ $FLSA_2$	$FLSA_3$	$FLSA_4$					
9	R01 16G 002	AUTO VANE		2	2	2	2					
10	R01 KV5 527	DRAIN HOSE		1	1	1	1					
11	—	GUIDE VANE		26	26	26	26	(BG25J821H01)				
	—	GUIDE VANE (WITH HANDLE)		4	4	4	4	(BG25J821H02)				
12	R01 12G 223	VANE MOTOR		1	1	1	1		MV			
13	R01 06A 202	ROOM TEMPERATURE THERMISTOR		1	1	1	1		RT1			
14	R01 KL5 202	INDOOR COIL THERMISTOR		1	1	1	1		RT2			
15	—	TERMINAL COVER		1	1	1	1	(BG02J608H07)				
16	R01 576 255	RUN CAPACITOR	3.0μF 440V	1	1	1	1		C			
17	T7W 560 310	CONTROLLER BOARD		1					I.B			
	T7W 27K 310	CONTROLLER BOARD			1	1	1		I.B			
18	T7W 520 239	FUSE	250V 6.3A	2	2	2	2		F1,2<I.B>			
19	—	CONTROLLER COVER		1	1	1	1	(BG02A648G02)				
20	—	CONTROLLER CASE		1	1	1	1	(BG25B573H06)				
21	T7W 552 799	TRANSFORMER		1					T			
	T7W 51J 799	TRANSFORMER			1	1	1		T			
22	T7W 512 716	TERMINAL BLOCK	2P(1/2)	1	1	1	1		TB4			
23	T7W 509 716	TERMINAL BLOCK	3P(L,N,⏚)	1	1	1	1		TB2			
24	—	MOTOR BAND		1	1	1	1	(BG02H065H01)				
25	T7W 571 762	FAN MOTOR		1	1	1	1		MF			
26	—	MOTOR LEG		1	1	1	1	(BG02A534H17)				
27	R01 16G 105	RUBBER MOUNT		2	2	2	2					
28	—	MOTOR BAND		1	1	1	1	(BG02H178H01)				
29	R01 17G 115	RIGHT LINEFLOW FAN		1	1	1	1					
30	—	CENTER SUPPORT		1	1	1	1	(BG00R259G07)				
31	—	BEARING BAND		1	1	1	1	(BG02L462H02)				
32	T7W 71J 675	FAN GUARD			2	2	2					
33	R01 12G 103	SLEEVE BEARING		1	1	1	1					
34	R01 KV5 102	BEARING MOUNT		1	1	1	1					
35	R01 58A 049	REMOTE CONTROLLER DOOR		1	1	1						
	R01 E01 049	REMOTE CONTROLLER DOOR					1					
36	T7W 570 200	REMOTE CONTROLLER		1	1	1			W.R			
	T7W E06 714	REMOTE CONTROLLER					1		W.R			
37	R01 58A 050	BATTERY COVER		1	1	1						
38	R01 18G 075	REMOTE CONTROLLER HOLDER		1	1	1						
	R01 E00 075	REMOTE CONTROLLER HOLDER					1					

14 OPTIONAL PARTS

1. REFRIGERANT PIPES

Service Ref. : PK-1.6FLA$_3$,
PK-2FLA$_3$,
PK-2.5FLA$_2$, PK-2.5FLA$_3$, PK-2.5FLA$_4$,
PK-3FLA$_2$, PK-3FLA$_3$, PK-3FLA$_4$, PK-3FLA$_5$,

Part No.	PAC-05FFS-E	PAC-07FFS-E	PAC-10FFS-E	PAC-15FFS-E
Pipe lenght	5m	7m	10m	15m
Pipe size O.D.	Liquid:ϕ9.52		Gas:ϕ15.88	
Pipe size O.D.	Indoor unit:Flared		Outdoor unit:Flared	

Service Ref. : PK-4FLSA$_2$, PK-4FLSA$_3$, PK-4FLSA$_4$

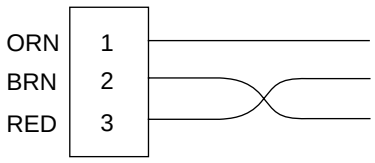
Part No.	PAC-SC51PI-E	PAC-SC52PI-E	PAC-SC53PI-E	PAC-SC54PI-E
Pipe lenght	5m	7m	10m	15m
Pipe size O.D.	Liquid:ϕ9.52		Gas:ϕ19.05	
Connection methed	Indoor unit:Flared		Outdoor unit:Flared	

Note 1. How to connect refrigerant pipes.
Factory supplied optional refrigerant pipings contain refrigerant at the above atmospheric pressures. As long as the connection takes no more than 5 minutes, no air will enter, and there will be no need for air purging. Remove the blind caps and make the connections within 5 minutes. After the connections for the indoor and outdoor units are made, open the stop valve on the outdoor unit to allow refrigerant gas to flow.
If piping length exceeds 5m,an additional charge of refrigerant is needed.
Note 2. The following main parts are contained in the optional refrigerant piping kit.
Heat insulating cover, vinyl tapes, nipples, sleeve and flange (for wall hole),connecting cables.

2. TIMER ADAPTER

This adapter is needed for system control and for operation via external contacts.

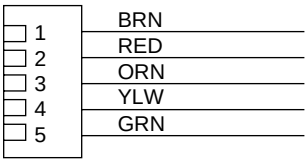
Part No.	PAC-SA89TA-E



3. MULTIPLE REMOTE CONTROLLER ADAPTER

This adapter is needed for remote indication (operation/check).

Part No.	PAC-SA88HA-E



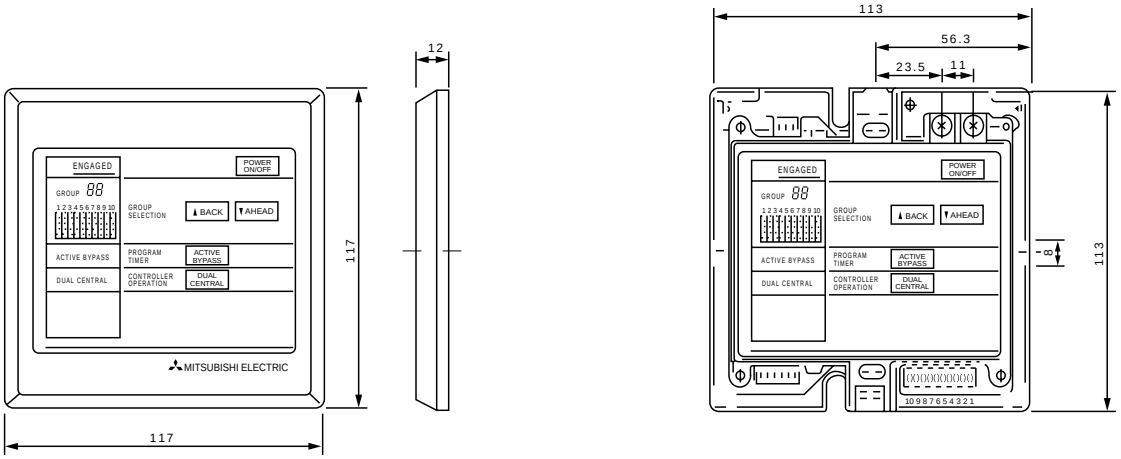
4. CENTRALIZED REMOTE CONTROLLER

Allows individual or combined control of up to 16 units.

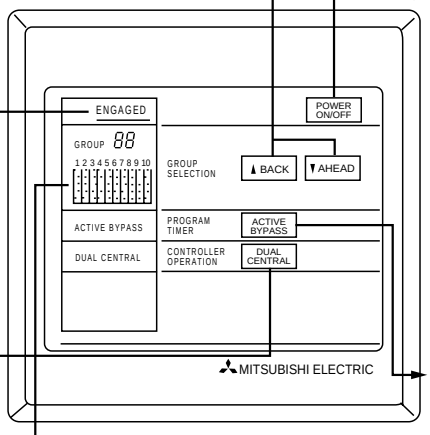
Part No.	PAC-805RC

4-1. Dimensions

Unit : mm



4-2. Names and Functions



"ENGAGED" indicator
When this indicator is lit, transmission is in progress and all switches are inoperative.

DUAL/CENTRAL switch
This change-over switch governs the operation of the accessory remote controller.

"DUAL"
Instructions from both the accessory remote controller and the centralized remote controller are valid. (Priority given to the last instruction received.)

"CENTRAL"
ON/OFF switching by the accessory remote controller is invalidated. Operation is controlled by the centralized remote controller only.
Initial setting is "DUAL".

LCD Matrix Display
This display indicates the operational status of all connected units either by steady lighting or by flashing.

POWER ON/OFF switch
Operation ON/OFF switch.

▲BACK ▼AHEAD buttons
These buttons are used to designate the attached unit(s). (They designate the unit to be centrally controlled.)

●When group “00” is designated; collective ON/OFF instruction is sent to all units.

●When group “01”-“16“ is designated; ON/OFF instruction is sent only to the designated units.

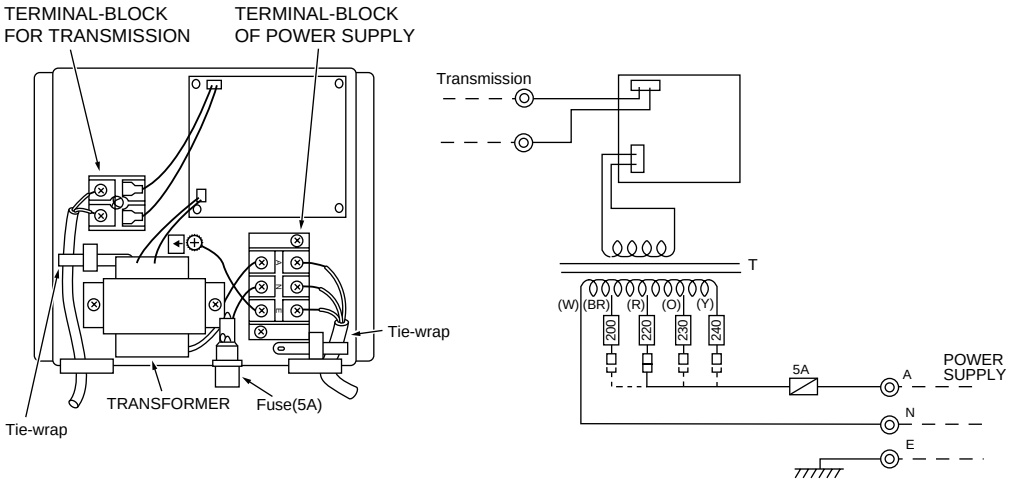
ACTIVE/BYPASS switch
This is a change-over switch for the program timer.
Use “BYPASS” when a program timer is not connected.

Independent “DUAL / CENTRAL” and “ACTIVE / BYPASS” setting of all the groups is possible. When the power supply to the centralized remote controller is cut due to power failure, all settings will return to original “DUAL” and “BYPASS”.

4-3 Connection method

(1) Connections in the power supply cord.

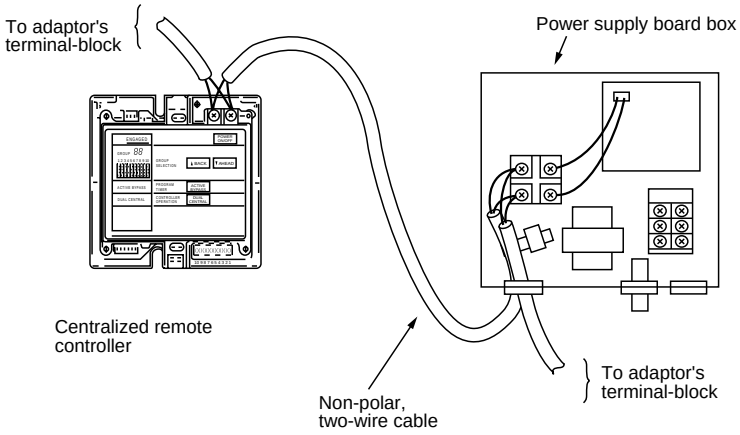
1. Connect the power supply cord to the power supply terminal-block and fix it in-place with a tie-wrap. Connect a single phase 200V AV (220, 230, 240V) to Ⓐ Ⓝ .
   As Ⓔ is the GND terminal, be sure to ground the earth wire.
2. Connect the transmission line to the transmission terminal-block and fix it in-place with a tie-wrap. Use a Ω1.6 (AWG 14) or above two-wire cable for the transmission line.
   CAUTION : Never connect the power supply cord to the transmission terminal-block.



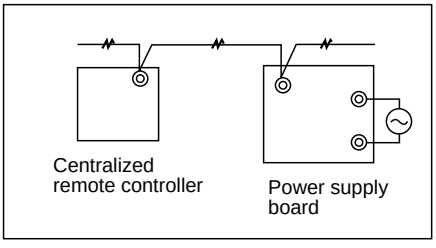
Wiring has to be changed when
a 200,230 or 240V power is used.

(2) Connection method of centralized remote controller and power supply board.

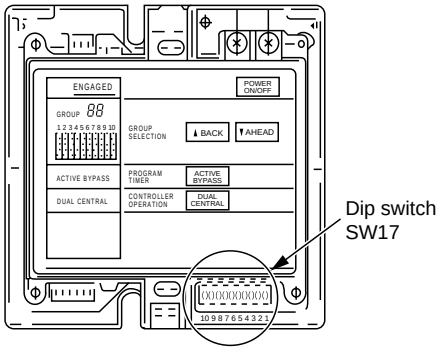
1. Connect the centralized remote controller and power supply board with a non-polar, two-wire cable.



2. Wiring diagram



3. Be sure to set the maximum address number with the dip switch SW17 on the centralized remote controller.

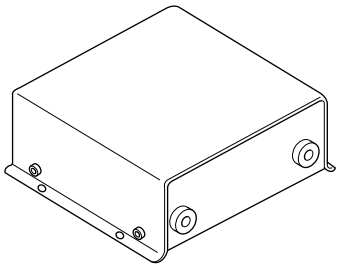
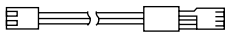
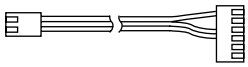
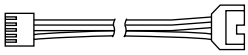
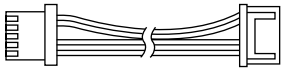


5. PROGRAM TIMER ADAPTER

This adapter is needed when a program timer(PAC-815PT)or a centralized remote controller(PAC-805RC)is used.

Part No	PAC-825AD

5-1 Parts included

① ADAPTER·····1P	② 3-core cable·····1P	③ 3-core cable·····1P
	 Length : 2m(6' 7")	 Length : 2m(6' 7")
	④ 4-core cable·····1P	⑤ 5-core cable·····1P
	 Length : 2m(6' 7")	 Length : 2m(6' 7")

5-2 Connection method

Connection and wiring methods differ with the type of the indoor unit used. Confirm the type before carrying out the work.

(1) Connections in the adapter box

1. Connect the power supply cord to the terminal-block and fix it in-place with a tie-wrap.
   Connect a single phase 200V (220, 230, 240V) AV to Ⓐ Ⓝ.
   As Ⓔ is the GND terminal, be sure to ground the earth wire.
2. Connect the transmission line to the transmission terminal-block and fix it in-place with a tie-wrap (when a centralized remote controller is being used).
   CAUTION : Never connect the power supply cord to the transmission terminal-block

Fig-1

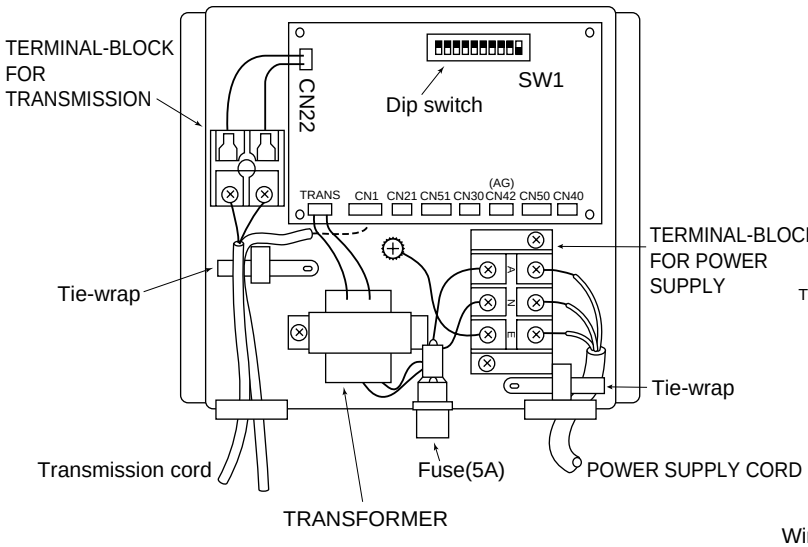
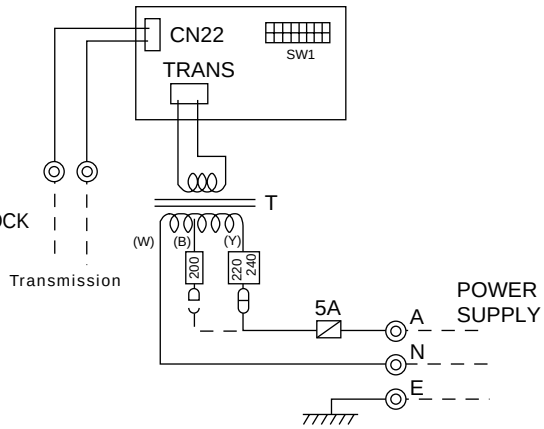


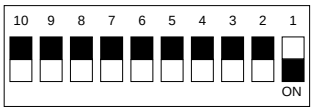
Fig-2



Wiring has to be changed when 200V power supply is used.

2. Set the address number (from SW1-1 to SW1-6) in the dip switch when a centralized remote controller is being used.
The address is the control number of each unit in the centralized control system.
As the address serves as a time-delay device as well, sequential starts (all units are triggered collectively by one single ON instruction) must be set with different address numbers (greater than O) for each adapter.

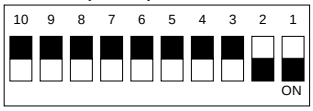
SW1



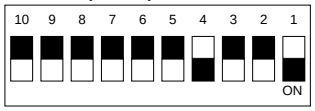
Levers No. 1-6 can set the following address respectively with binary notations

Toggle	No.6ON	No.5ON	No.4ON	No.3ON	No.2ON	No.1ON
Address	32	16	8	4	2	1

(Ex. 1) 3=2+1



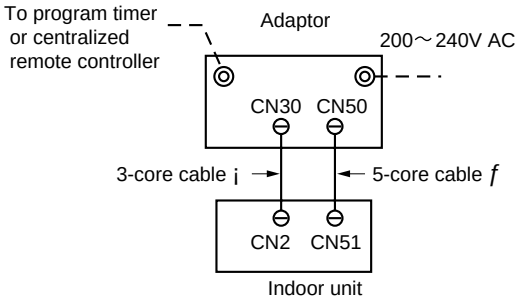
(Ex. 2) 9=8+1



(Ex. 3) 15=8+4+2+1

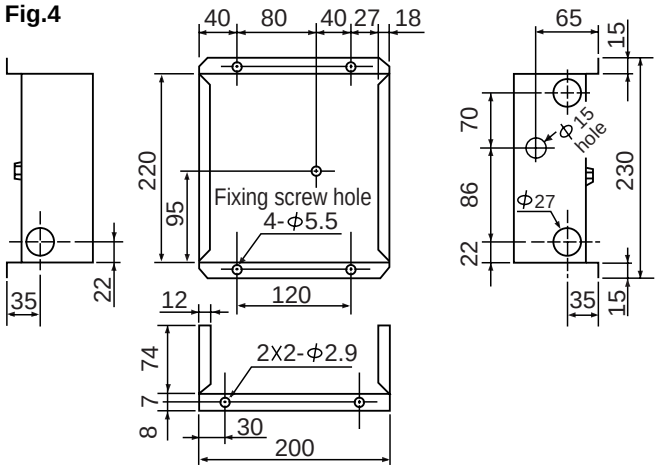
(2) Connection from adaptor

Fig.3



Max. Length of each cable is 10m.

Fig.4



6. TIMER

Model Name	PAC-SK65PT
Product Name	Program timer

(The PAC-SK65PT can only be used together with the PAC-825AD)

6-1 Program timer specifications

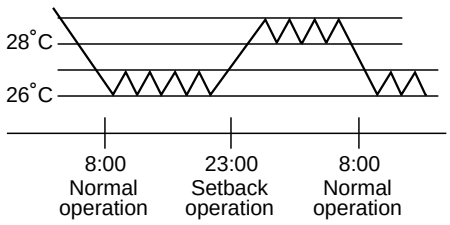
Product name		Program Timer
Model name.		PAC-SK65PT
Mounting method		Wall mount
Clock system		Quarts clock
Clock accuracy		±50 second/month
Display	Time	Liquid crystal display
	Week	Liquid crystal display
Program cycle		24 hours
Timer setting unit		30 minutes
Number. of set point		48/day
Minimum ON/OFF interval		—
Power failure safeguard		—
Rated power supply		5V DC
Set back function		Not provided

6-2 Feature of program timer

(1) Daily timer function
Daily timer can be set in 30 minutes units for up to 24 hours.
Each unit can be set for unit ON, unit OFF, or setback operation.

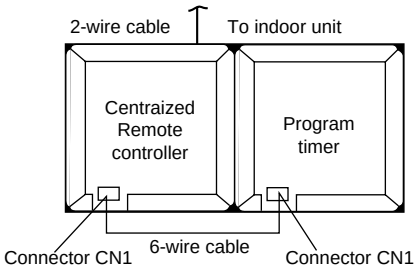
(2) Setback operation (PAC-SK65PT)
Set back operation is useful for reducing running costs
e.g. At a hotel with a 24-hour system
8:00~23:00 Cooling operation with set temperature at 26°C
23:00~8:00 Setback operation with 2 degrees of setback
As shown in the chart on the night, the set temperature rises 2 degrees automatically during the setback operation. When the setback operation ends, normal operation will begin.

(3) Weekly timer function
Daily timer function can apply to each day of the week.



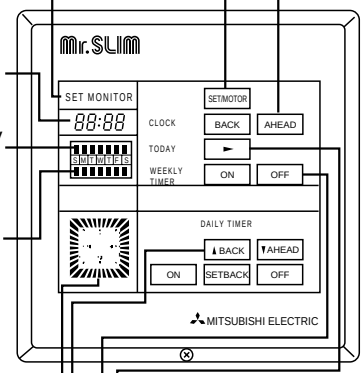
6-3. How to connect program timer (PAC-SK65PT)

(1) Install the program timer next to the remote controller the same way as the remote controller is installed.
(2) Connect the program timer and the remote controller with a 6-wire cable as shown in the figure below



NOTE:While the program timer is connected to the remote controller, the 24hour ON/OFF timer on the remote controller will not work.

6-4. Name and functions
(PAC-SK65PT)



- MODE selector button : Used to select \MONITOR" or "SET" mode.

"MONITOR" : Indicates the current timer setting. All buttons except SET/MONITOR will not work.This is the normal status.
"SET" : "SET" is used to set the time, change the day of the week, and program the daily and weekly timer.

- Clock adjustment button : Used to adjust the current time.Press AHEAD button to advance the time. Each time the button is pressed the time advances by 1 minute. Pressing continuously advances 1 minute in a 0.5 second interval. When the lower digit of minute becomes 0 the indication advances in 10 minutes unit. BACK button is used for reversing the time. Each time the button is pressed the time reverses by 1 minute. Pressing continuously reverses the time by 1 minute in a 0.5 second interval. When the lower digit of minute becomes 0 the indication reverses in 10 minutes unit.

Mode display
Current time display
Current day display
Weekly timer display
Day timer display

- Weekday setting button : Used to set the day of week. Pressing ▶ button changes the day.
- Weekly timer button : Used to set the weekly timer.
- Daily timer button : Used to set the timer settings in units of 30 minutes.

NOTE : Display above is only an example.

7. Drain pump (for PK-2.5FLA, PK-3FLA, PK-4FLSA)

Model Name	PAC-SE89DM-E

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Distributed in Sep.2001. No. OC129 REVISED EDITION-A 870
Reprinted in May.2001. No. OC129 5
Issued in Nov.1999. No. OC129 300
Issued in Aug.1999. No. OC129 50
Issued in Mar.1999. No. OC129 50
Issued in Jun.1997. No. OC129 2420
Made in Japan

New publication, effective Sep. 2001
Specifications subject to change without notice